



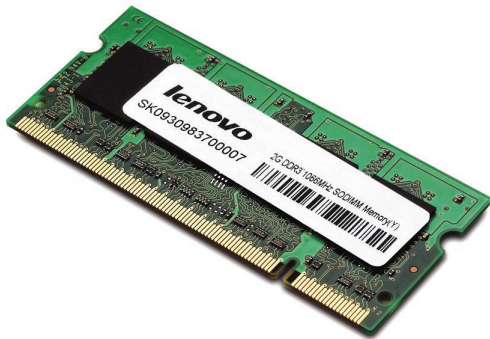
Personal Systems Reference

Lenovo® ThinkPad® TopSeller™ Notebooks

April 2010 - Version 376



Visit www.lenovo.com/psref for the latest version



PC3-8500 DDR3 Low-Halogen SODIMM
1GB 55Y3706
2GB 55Y3707



ThinkPad Mini Dock Plus Series 3
433810U



USB 2.0 Portable Secure Hard Disk
160GB 43R2018
320GB 43R2019



ThinkPad Bluetooth Laser Mouse
41U5008



ThinkPad Checkpoint Friendly
Business Topload Case
51J0418



90W Ultraslim AC/DC Combo Adapter
41R4493

ThinkPad®



Lenovo® ThinkPad R400



ThinkLight on



Lenovo USB-to-DVI Monitor Adapter
45K5296



Lenovo ThinkPad R400



Lenovo ThinkPad R400



ThinkPad Battery 33++ (9-cell)
43R2499

ThinkPad® R400 7438 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue- tooth | Bat- tery cells | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|---------------------------|----------------|-----------------------|---------|---------------|
| 7438-68U | P8700 | 2.53 | 2GB | 14.1" WXGA | Cam | GMA | 250G 5400 | DVD±RW | Intel 5100 ²⁸ | None | None | Finger | Blue | 6 | XP Pro | Oct 09 |

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has an EasyServ™¹⁹ depot repair service 3-year limited warranty

| | | | | | | |
|---|---|--------------------------------|---------|---|--|--|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) | | |
| Memory | 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available; | | | | | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | |
| Widescreen display | 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio | | | | | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | | | Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536@75Hz | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | |
| Dimensions ³ | <i>6-cell 14.1W" (WxDxH):</i> 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm | | | | | |
| Weight ² | <i>6-cell:</i> starting at 5.1 lb (2.3kg) | | | | | |
| Case material | <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced | | | | | |
| Battery - life ¹⁰ | <i>6-cell:</i> up to 5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.5 hr; <i>9-cell:</i> up to 7.5 hr | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) | | | | | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | | | | | |
| PC Card | One slot (Type I, Type II), CardBus 32-bit | | | | | |
| Smart Card Read | None | | | | | |
| Multicard Reader | None | | | | | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | |
| Mini PCI Express | Three Mini PCI Express slots | | | | | |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | | | | |
| WWAN | None | | | | | |
| 2G Turbo | None | | | | | |
| UWB | None | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | |
| Intel AMT | None | | | | | |
| Audio support | High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | | | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™. ¹⁹ depot repair service / service upgrades ²² available | | | | | |
| 1GB PC3-8500 DDR3 L-H SODIMM | 55Y3706 | ThinkPad Battery 33 (4-cell) | 41U3196 | | | |
| 2GB PC3-8500 DDR3 L-H SODIMM | 55Y3707 | ThinkPad Battery 33+ (6-cell) | 41U3198 | | | |
| ThinkPad Advanced Mini Dock | 250410U | ThinkPad Battery 33++ (9-cell) | 43R2499 | | | |
| Other accessories on O-R400 sheet | Other accessories at lenovo.com/accessories | | | | | |

See footnotes for important warranty information
US model announced October 22, 2009

Intel Centrino® 2 processor technology

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ThinkPad® R400 7443 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue- tooth | Bat- tery cells | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|---------------------------|----------------|-----------------------|---------|---------------|
| 7443-31U | T6670 | 2.20 | 2GB | 14.1" WXGA | Cam | GMA | 250G 5400 | DVD±RW | 11n ²⁸ | None | None | Finger | Blue | 6 | XP Pro | Oct 09 |

• This small and medium business (SMB) model is part of the US TopSeller™ Program

| | | | | | | |
|---|--|---|-------------------------|--|--|--|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ 2 Duo processor T6670 with dual-core Intel HD Boost, 800MHz system bus, and 2MB L2 cache | | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | |
| Memory | 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available; | | | | | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | |
| Widescreen display Camera | 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536@75Hz | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>6-cell 14.1W" (WxDxH):</i> 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm <i>6-cell:</i> starting at 5.1 lb (2.3kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.5 hr; <i>9-cell:</i> up to 7.5 hr | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit | | | | | |
| ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports | None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | |
| Mini PCI Express 11n ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | Three Mini PCI Express slots 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | |
| Limited warranty ¹² | 1-year - EasyServ™. ¹⁹ depot repair service / service upgrades ²² available | | | | | |
| 1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Mini Dock Other accessories on O-R400 sheet | 55Y3706 55Y3707 250410U | ThinkPad Battery 33 (4-cell) ThinkPad Battery 33+ (6-cell) ThinkPad Battery 33++ (9-cell) Other accessories at lenovo.com/accessories | 41U3196 41U3198 43R2499 | | | |

See footnotes for important warranty information
US model announced October 22, 2009

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(LAG3-8) October 2009

Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann | 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann | 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann | 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann | 03/17/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |

Ultrabay Slim 9.5mm

| | | | |
|---|---------|-----|----------|
| Serial ATA Hard Drive Bay Adapter III ⁴⁸ | 43N3412 | ann | 06/23/09 |
| DVD-ROM Ultrabay Slim SATA 1.5Gb/s ⁴⁸ | 43N3212 | ann | 08/05/08 |
| CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸ | 43N3213 | ann | 08/05/08 |
| DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸ | 43N3214 | ann | 08/05/08 |

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

| | | | |
|---|---------|-----|----------|
| DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s | 43R9147 | ann | 08/05/08 |
| DVD Burner Ultrabay Enh SATA 1.5Gb/s | 43R9149 | ann | 08/05/08 |
| Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s | 43R9150 | ann | 08/05/08 |

Storage and removable storage

| | | | |
|--|---------|-----|----------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann | 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann | 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann | 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann | 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann | 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann | 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann | 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann | 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

| | | | |
|---|---------|-----|----------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |
| ThinkPad Advanced Mini Dock | 250410U | ann | 09/20/05 |

Keyboard

| | | | |
|--|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

| | | | |
|---------------------------------------|---------|-----|----------|
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|--|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Security

| | | | |
|--|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| ThinkPad T400/T410/R400 Privacy Filter | 43R2472 | ann | 08/05/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |
| PC Card Gemplus Smart Card Reader | 41N3004 | ann | 12/13/05 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann | 06/27/06 |

Batteries

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 33 (4-cell) | 41U3196 | ann | 05/09/07 |
| ThinkPad Battery 33+ (6-cell) | 41U3198 | ann | 05/09/07 |
| ThinkPad Battery 33++ (9-cell) | 43R2499 | ann | 03/04/08 |
| ThinkPad Battery 42 (3-cell, bay) ⁴³ | 57Y4536 | ann | 08/25/09 |

⁴³ Used in Ultrabay Slim bay.

| | | | |
|---|---------|-----|----------|
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |
|---|---------|-----|----------|

⁴⁴ Requires the ThinkPad 90W AC Adapter

40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

| | | | |
|---------------------------------------|---------|-----|----------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann | 01/05/06 |
|---------------------------------------|---------|-----|----------|

⁴⁵ Only compatible with the integrated graphics models.

| | | | |
|----------------------------------|---------|-----|----------|
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | | |
|--------------------------------------|---------|-----|----------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 14" widescreen models:

| | | | |
|--------------------------|---------|-----|----------|
| ThinkPad 14W Case Sleeve | 57Y4294 | ann | 03/16/10 |
|--------------------------|---------|-----|----------|

Up to 15.4" widescreen models:

| | | | |
|---|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Up to 15.6" widescreen models:

| | | | |
|------------------------------------|---------|-----|----------|
| Wenger Backpack for Lenovo | 57Y4271 | ann | 01/07/10 |
| Wenger Slim Case for Lenovo | 57Y4272 | ann | 01/07/10 |
| Wenger Deluxe Slim Case for Lenovo | 57Y4273 | ann | 01/07/10 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|-----------------------------------|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad R500



ThinkPad Battery 41++ (9-cell)
40Y6797



Lenovo ThinkPad R500



Lenovo USB Fingerprint Keyboard
73P4730



Lenovo ThinkPad R500



Lenovo Essential Notebook Stand
45J9292

ThinkPad® R500 2714 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe Turbo | Finger print reader | Blue- tooth | Bat- tery cells | Workhorse (W) Global (G) Avail date | | |
|------------|----------------|------|--------|----------------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|--------------------|---------------------------|----------------|-----------------------|---|----|--------|
| 2714-AFU | T6670 | 2.20 | 2GB | 15.4" WXGA | Cam | GMA | 250G 5400 | DVD+RW | 11n ²⁸ | None | Finger | Blue | 6 | XP Pro | No | Oct 09 |

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

| | | |
|---|--|---|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ 2 Duo processor T6670 with dual-core , Intel HD Boost, 800MHz system bus, and 2MB L2 cache | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Memory | 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available; | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display Camera | 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰ | <i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) black Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 hr | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) | |
| ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports | One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | |
| Mini PCI Express 11n ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | Two Mini PCI Express slots 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92® modem Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | |

See footnotes for important warranty information
US model announced October 22, 2009

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(WKK3-8) October 2009

ThinkPad® R500 2717 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe Turbo | Finger print reader | Bat- tery Blue- tooth cells | Workhorse (W) Global (G) Avail |
|------------|----------------|------|--------|----------------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|--------------------|---------------------------|---|-----------------------------------|
| 2717-ASU | T6670 | 2.20 | 3GB | 15.4" WXGA | Cam | GMA | 320G 5400 | DVD±RW | 11n ²⁸ | None | Finger | Blue 6 | XP Pro No Oct 09 |
| 2717-ATU | P8700 | 2.53 | 2GB | 15.4" WXGA | Cam | GMA | 250G 5400 | DVD±RW | Intel 5100 ²⁸ | None | Finger | Blue 6 | XP Pro No Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|---|--|--|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ 2 Duo processor T6670 with dual-core, Intel HD Boost, 800MHz system bus, and 2MB L2 cache or Intel Core 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | | |
| Memory | 2GB or 3GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available; | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | |
| Widescreen display Camera | 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz | | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰ | <i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) black Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 hr | | | | | | | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit | | | | | | | | | | Supports ThinkVantage® technologies | | |
| ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | |
| Mini PCI Express Intel 5100 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | Two Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | | | | ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | |
| Security Security chip Fingerprint reader Limited warranty ¹² | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | | |

See footnotes for important warranty information
US models announced October 22, 2009

Intel Centrino® 2 processor technology

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(WKK3-7) October 2009

Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann | 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann | 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann | 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann | 03/17/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |

Ultrabay Slim 9.5mm

| | | | |
|---|---------|-----|----------|
| Serial ATA Hard Drive Bay Adapter III ⁴⁸ | 43N3412 | ann | 06/23/09 |
| DVD-ROM Ultrabay Slim SATA 1.5Gb/s ⁴⁸ | 43N3212 | ann | 08/05/08 |
| CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸ | 43N3213 | ann | 08/05/08 |
| DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸ | 43N3214 | ann | 08/05/08 |

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

| | | | |
|---|---------|-----|----------|
| DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s | 43R9147 | ann | 08/05/08 |
| DVD Burner Ultrabay Enh SATA 1.5Gb/s | 43R9149 | ann | 08/05/08 |
| Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s | 43R9150 | ann | 08/05/08 |

Storage and removable storage

| | | | |
|--|---------|-----|----------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann | 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann | 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann | 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann | 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann | 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann | 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann | 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann | 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

| | | | |
|--|---------|-----|----------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann | 08/26/08 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |
| ThinkPad Advanced Mini Dock | 250410U | ann | 09/20/05 |

Keyboard

| | | | |
|--|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

| | | | |
|---------------------------------------|---------|-----|----------|
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|--|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Security

| | | | |
|--|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| T500/R500/W500 Series 15W Privacy Filter | 43R2474 | ann | 08/05/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |
| PC Card Gemplus Smart Card Reader | 41N3004 | ann | 12/13/05 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann | 06/27/06 |

Batteries

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 41+ (6-cell) | 40Y6799 | ann | 01/05/06 |
| ThinkPad Battery 41++ (9-cell) | 40Y6797 | ann | 09/20/05 |
| ThinkPad Battery 42 (3-cell, bay) ⁴³ | 57Y4536 | ann | 08/25/09 |

⁴³ Used in Ultrabay Slim bay.

| | | | |
|---|---------|-----|----------|
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |
|---|---------|-----|----------|

⁴⁴ Requires the ThinkPad 90W AC Adapter

40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

| | | | |
|---------------------------------------|---------|-----|----------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann | 01/05/06 |
|---------------------------------------|---------|-----|----------|

⁴⁵ Only compatible with the integrated graphics models.

| | | | |
|----------------------------------|---------|-----|----------|
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | | |
|-------------------------------------|---------|-----|----------|
| •Palm device charge tip (L7) | 41R4315 | ann | 12/18/07 |
| •BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| •iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| •Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.4" widescreen models:

| | | | |
|---|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|---|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable | 57Y4393 | ann | 08/04/09 |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | ann | 08/05/08 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad T400



PC3-8500 DDR3 Low-Halogen SODIMM
1GB 55Y3706
2GB 55Y3707
4GB 55Y3708



Lenovo ThinkPad T400 with
ThinkPad T400/T410/R400 Privacy Filter
43R2472



Lenovo ThinkPad T400



Lenovo ThinkPad T400



Lenovo ThinkPad T400

ThinkPad® T400 6473 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue- tooth | Card slot | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|---------------------------|----------------|--------------|---------|---------------|
| 6473-41U | P8700 | 2.53 | 2GB | 14.1" WXGA | LED | Cam | GMA | 320G 7200 | DVD±RW | Intel 5100 ²⁸ | None | None | Finger | Blue | PC XP Pro | Oct 09 | |
| 6473-43U | P8700 | 2.53 | 2GB | 14.1" WXGA | LED | Cam | GMA | 128G SSD | DVD±RW | Intel 5100 | None | None | Finger | Blue | PC XP Pro | Oct 09 | |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|--------------------------------|--|--|---|
| Positioning Processor | Premiere performance; two spindles Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW Ultrabay Slim | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable | | |
| SATA disk | One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | | |
| Widescreen display | 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio | | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | |
| Dimensions ³ | <i>6-cell 14.1W"</i> (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm | | |
| Weight ² | <i>6-cell:</i> starting at 5.0 lb (2.3kg) | | |
| Case material | <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | | |
| Battery - life ¹⁰ | <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) | | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | | |
| PC Card | One slot (Type I, Type II), CardBus 32-bit | | |
| Smart Card Read | None | | |
| Multicard Reader | None | | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | |
| Mini PCI Express | Three Mini PCI Express slots | | |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | |
| WWAN upg | None | | |
| 2G Turbo | None | | |
| UWB | None | | |
| Modem | 56K V.92 ⁶ modem | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | |
| Intel AMT | None | | |
| Audio support | High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | |

| Supports ThinkVantage® technologies | | |
| 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378 | | |
| ThinkPlus™.²² 3-year LOR²⁴ 9x5 NBD 45K6021 | | |
| ThinkPlus 4-year LOR 9x5 NBD 45K6022 | | |
| ThinkPlus 5-year LOR 9x5 NBD 45K6024 | | |
| ThinkPlus 4-year P&L P/U Depot 45K6023 | | |
| ThinkPlus 5-year P&L P/U Depot 45K6025 | | |
| Post-warranty annual maintenance agreements at **lenovo.com/thinkplus/warranty** | | |

See footnotes for important warranty information
US models announced October 22, 2009

Intel Centrino® 2 processor technology

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(ML3-17) October 2009

ThinkPad® T400 6473 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue-Card tooth slot | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-----------------------|------------------------------|---------------------------|-------------------------|----------------|---------------|
| 6473-4FU | P8700 | 2.53 | 2GB | 14.1" | WXGA | LED | Cam | GMA 320G 7200 | DVD±RW | Intel 5100 ²⁸ | | | None | Finger | Blue PC Pro 32 | Oct 09 |
| 6473-5BU | P8700 | 2.53 | 2GB | 14.1" | WXGA | LED | Cam | GMA 320G 7200 | DVD±RW | Intel 5100 | Verizon ¹⁶ | | None | Finger | Blue PC Pro 32 | Nov 09 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | Premiere performance; two spindles Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 | | | | | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | | | | |
| Widescreen display | 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | | | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz | | | | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | | | |
| Dimensions ³ | 6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm | | | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 5.0 lb (2.3kg) | | | | | | | | | | | | | | | |
| Case material | Top: Super-Elastic Polycarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic | | | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr | | | | | | | | | | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit | | | | | | | | | | | | | | | |
| ExpressCard/54 | One slot (Type I, Type II), CardBus 32-bit | | | | | | | | | | | | | | | |
| PC Card | One slot (Type I, Type II), CardBus 32-bit | | | | | | | | | | | | | | | |
| Smart Card Read | None | | | | | | | | | | | | | | | |
| Multicard Reader | None | | | | | | | | | | | | | | | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | | | |
| Mini PCI Express | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon® | | | | | | | | | | | | | | | |
| Intel 5100 ²⁸ | | | | | | | | | | | | | | | | |
| Verizon ¹⁶ | | | | | | | | | | | | | | | | |
| 2G Turbo | None | | | | | | | | | | | | | | | |
| UWB | None | | | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | | | |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack | | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | | |
| Security chip | 4FU model: Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | | | | | | | | | | | | | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available | | | | | | | | | | | | | | | |

See footnotes for important warranty information

⚡ Intel Centrino® 2 processor technology

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⚡ US model announced November 3, 2009; previous model on October 22, 2009

(ML3-18) March 2010

ThinkPad® T400 7417 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue-Card tooth slot | Pre- load | Avail date |
|------------|----------------|------|--------|----------------------------|----------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|---------------------------|-------------------------|--------------|---------------|
| 7417-21U | P8600 | 2.40 | 2GB | 14.1" WXGA | LED | | GMA | 250G 5400 | DVD±RW | Intel 5100 ²⁸ | None | None | Fing | PC | XP Pro | Oct 09 |
| 7417-23U | P8600 | 2.40 | 2GB | 14.1" WXGA | LED | Cam | GMA | 320G 5400 | DVD±RW | Intel 5100 | None | None | Fing | Blue PC | XP Pro | Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|--|---|--|--|
| Processor | Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB ⁸ (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display Camera | 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA DB-15) | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions | | Supports ThinkVantage® technologies |
| Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰ | 6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm 6-cell: starting at 5.0 lb (2.3kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr | | 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) | | ThinkPlus™. 22 1-year LOR ²⁴ 9x5 NBD 45K5968 |
| ExpressCard/54 PC Card Smart Card read Multicard reader Ports | One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 |
| Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack | | ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information
US models announced October 22, 2009

✚ Intel Centrino® 2 processor technology

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(ML3-19) October 2009

ThinkPad® T400 7417 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue- tooth | Card slot | Pre- load | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|---------------------------|----------------|--------------|--------------|---------------|
| 7417-22U | P8600 | 2.40 | 2GB | 14.1" WXGA | LED | | GMA | 250G 5400 | DVD±RW | Intel 5100 ²⁸ | None | None | Fing | None | PC Pro 32 | Oct 09 | |
| 7417-31U | P8700 | 2.53 | 2GB | 14.1" WXGA | LED | Cam | GMA | 250G 5400 | DVD±RW | WiMAX | None | None | None | None | PC Pro 32 | Nov 09 | |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|
| Processor | Intel® Core™ 2 Duo processor P8600 or P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 | | | | | | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | | | | | |
| Widescreen display | 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | | | | | | |
| Camera | | | | | | | | | | | | | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA DB-15) | | | | | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | | | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | | | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | | | | |
| Dimensions ³ | 6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm | | | | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 5.0 lb (2.3kg) | | | | | | | | | | | | | | | | |
| Case color | Black | | | | | | | | | | | | | | | | |
| Case material | <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | | | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr | | | | | | | | | | | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) | | | | | | | | | | | | | | | | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | | | | | | |
| PC Card | One slot (Type I, Type II), CardBus 32-bit | | | | | | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | | | | | | |
| Multicard reader | None | | | | | | | | | | | | | | | | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | | | | |
| Mini PCI Express | Three Mini PCI Express slots | | | | | | | | | | | | | | | | |
| Intel 5100 ²⁸ | <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | | | | | | | | | | | | | | | |
| WiMAX | <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak) | | | | | | | | | | | | | | | | |
| WWAN upg | None | | | | | | | | | | | | | | | | |
| 2G Turbo | None | | | | | | | | | | | | | | | | |
| UWB | None | | | | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | | | | |
| Bluetooth™ | None | | | | | | | | | | | | | | | | |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack | | | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | | | |
| Security chip | 22U model: Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | | | | | | | | | | | | | | | |
| Fingerprint reader | <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

Intel Centrino® 2 processor technology

© Lenovo

US model announced November 3, 2009; previous model on October 22, 2009

(ML3-20) November 2009

ThinkPad® T400 2765 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Switchable graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo slot | Card slot | Pre- load | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|--------------------|-----------------------------------|--------------|--------------|---------------|
| 2765-81U | P8700 | 2.53 | 3GB | 14.1" WXGA+ | LED | Cam | GMA, HD 3470 | 320G 7200 | DVD±RW | Intel 5100 ²⁸ | | None | PC | XP Pro | Oct 09 |
| 2765-82U | P8700 | 2.53 | 3GB | 14.1" WXGA+ | | Cam | GMA, HD 3470 | 320G 7200 | DVD±RW | Intel 5100 | AT&T ²³ | None | PC | XP Pro | Oct 09 |
| 2765-83U | T9600 | 2.80 | 4GB | 14.1" WXGA+ | LED | Cam | GMA, HD 3470 | 320G 7200 | DVD±RW | Intel 5100 | | None | PC | XP Pro | Oct 09 |
| 2765-94U | P8700 | 2.53 | 3GB | 14.1" WXGA+ | | Cam | GMA, HD 3470 | 320G 7200 | DVD±RW | Intel 5100 | WWAN upg | None | PC | XP Pro | Nov 09 |
| 2765-95U | T9600 | 2.80 | 4GB | 14.1" WXGA+ | | Cam | GMA, HD 3470 | 320G 7200 | DVD±RW | Intel 5100 | WWAN upg | None | PC | XP Pro | Nov 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|---|--|--|---|
| Positioning Processor | Premiere performance; two spindles Intel® Core™ 2 Duo processor P8700 or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8700:</i> 3MB L2 cache; <i>T9600:</i> 6MB L2 cache | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display | <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio | | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | | |
| Switchable graphics | Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA) | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>9-cell:</i> starting at 5.4 lb (2.4kg) <i>Top:</i> Super-Elastic Polycarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 11.3 hr | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit | | |
| ExpressCard/54 PC Card Smart Card Reader Multicard Reader Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | |
| Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³ | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with <u>AT&T</u> | | |
| 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available | | |

| |
|---|
| Supports ThinkVantage® technologies |
| 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 45K6021 |
| ThinkPlus 4-year LOR 9x5 NBD 45K6022 |
| ThinkPlus 5-year LOR 9x5 NBD 45K6024 |
| ThinkPlus 4-year P&L P/U Depot 45K6023 |
| ThinkPlus 5-year P&L P/U Depot 45K6025 |
| Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information ✦ Intel Centrino® 2 processor technology
 US models announced November 3, 2009; previous models on October 22, 2009

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 (ML3-16) March 2010

Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann | 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann | 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann | 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann | 03/17/09 |
| 4GB PC3-8500 DDR3 SODIMM | 51J0493 | ann | 03/03/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann | 06/23/09 |

Ultrabay Slim 9.5mm

| | | | |
|---------------------------------------|---------|-----|----------|
| Serial ATA Hard Drive Bay Adapter III | 43N3412 | ann | 06/23/09 |
| DVD-ROM Ultrabay Slim SATA 1.5Gb/s | 43N3212 | ann | 08/05/08 |
| CD-RW/DVD-ROM Ultrabay Slim SATA | 43N3213 | ann | 08/05/08 |
| DVD Burner Ultrabay Slim SATA 1.5Gb/s | 43N3214 | ann | 08/05/08 |

Storage and removable storage

| | | | |
|--|---------|-----|----------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann | 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann | 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann | 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann | 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann | 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann | 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann | 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann | 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

| | | | |
|--|---------|-----|----------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann | 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover) | 43N3417 | ann | 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | | |
|--|---------|-----|----------|
| Verizon® WWAN UNDP Broadband Mini PCle | 43R9151 | ann | 08/05/08 |
| AT&T® WWAN HSPA Broadband Mini PCle | 43R9152 | ann | 08/26/08 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |
| ThinkPad Advanced Mini Dock | 250410U | ann | 09/20/05 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|--|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Security

| | | | |
|--|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |
| ThinkPad T400/T410/R400 Privacy Filter | 43R2472 | ann | 08/05/08 |
| Note: ThinkPad T400/T410/R400 Privacy Filter (43R2472) is not supported on T400s or T410s. | | | |
| PC Card Gemplus Smart Card Reader | 41N3004 | ann | 12/13/05 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann | 06/27/06 |

Batteries

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 33 (4-cell) | 41U3196 | ann | 05/09/07 |
| ThinkPad Battery 33+ (6-cell) | 41U3198 | ann | 05/09/07 |
| ThinkPad Battery 33++ (9-cell) | 43R2499 | ann | 03/04/08 |
| ThinkPad Battery 42 (3-cell, bay) ⁴³ | 57Y4536 | ann | 08/25/09 |
| ⁴³ Used in Ultrabay Slim bay. | | | |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |
| ⁴⁴ Requires the ThinkPad 90W AC Adapter 40Y7659 or the adapter provided with the system. | | | |

More information at www.lenovo.com/alldaycomputing

| | | | |
|--|---------|-----|----------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann | 01/05/06 |
| ⁴⁵ Only compatible with the integrated graphics models. | | | |
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | | |
|--------------------------------------|---------|-----|----------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 14" widescreen models:

| | | | |
|--------------------------|---------|-----|----------|
| ThinkPad 14W Case Sleeve | 57Y4294 | ann | 03/16/10 |
|--------------------------|---------|-----|----------|

Up to 15.4" widescreen models:

| | | | |
|---|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Up to 15.6" widescreen models:

| | | | |
|------------------------------------|---------|-----|----------|
| Wenger Backpack for Lenovo | 57Y4271 | ann | 01/07/10 |
| Wenger Slim Case for Lenovo | 57Y4272 | ann | 01/07/10 |
| Wenger Deluxe Slim Case for Lenovo | 57Y4273 | ann | 01/07/10 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|---|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |
| ⁴⁶ Compatible on selected Lenovo and ThinkVision monitors. | | | |

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T410



Lenovo ThinkPad T410



Lenovo ThinkPad T410



Lenovo ThinkPad T410



Lenovo ThinkPad T410



ThinkPad Mini Dock Series 3
433710U

ThinkPad® T410 2516 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | Max Base (GHz) | turbo (GHz) | Memory | Wide-screen display | CCFL or LED | Cam-era | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Bat-tery cells | Intel vPro | Preload | Avail date |
|------------|-----------|----------------|-------------|--------|---------------------|-------------|---------|-------------------------------|-----------------------|---------------------|---------------------|------------|----------------|------------|---------|------------|
| 2516-ADU | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA | LED | 2.0M | 250G 5400 | 11b/g/n | None | None | None | 6 | No | Pro 32 | Jan 10 |

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

| | | |
|---|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display Camera | 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | Supports ThinkVantage® technologies |
| Dimensions ³ Weight ² Case color Case material | 14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> High Elasticity PolyCarbonate (HEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 |
| PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 ⁶ modem None Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | |

See footnotes for important warranty information
US model announced January 7, 2010

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ThinkPad® T410 2518 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | CCFL or LED | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Bat- tery cells | Intel vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|---------------------|-------------|--------|-------------------------------|--------------------------|---------------------|---------------------|------------|-----------------|------------|---------|------------|
| 2518-C3U | i5-540M | 2.53 | 3.06 | 2GB | 14.1" WXGA | LED | 2.0M | 320G 7200 | 11b/g/n | WWAN upg | Finger | Blue | 6 | | XP Pro | Jan 10 |
| 2518-F4U | i5-540M | 2.53 | 3.06 | 3GB | 14.1" WXGA+ | LED | 2.0M | 320G 7200 | Intel 6200 ²⁸ | WWAN upg | Finger | Blue | 6 | vPro | XP Pro | Jan 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Presentation Director• ThinkVantage Productivity Center• Lenovo System Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-Italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB ⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display | <i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case color Case material | <i>14.1W" (WxDxH):</i> 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> High Elasticity PolyCarbonate (HEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | |
| PCle Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCle Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCle Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem | |
| Modem Bluetooth™ Ethernet | Bluetooth 2.1 wireless, LED indicator <i>Non-vPro model:</i> Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCle x1 <i>vPro model:</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCle x1 | |
| Intel AMT Audio support | Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

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|---|
| Supports ThinkVantage® technologies |
| 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 |
| ThinkPlus 4-year LOR 9x5 NBD 45K6022 |
| ThinkPlus 5-year LOR 9x5 NBD 45K6024 |
| ThinkPlus 4-year P&L P/U Depot 45K6023 |
| ThinkPlus 5-year P&L P/U Depot 45K6025 |
| Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information
US models announced January 7, 2010

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ThinkPad® T410 2518 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | Max Base turbo (GHz) | Memory | Wide-screen display | CCFL or LED | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Finger-print reader | Bat-tery Intel vPro | Preload | Avail date |
|------------|-----------|----------------------|--------|---------------------|-------------|--------|-------------------------------|-----------------------|--------------------------|-----------|---------------------|---------------------|-------------|------------|
| 2518-C2U | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA | LED | 2.0M | 250G 5400 | Intel 6200 ²⁸ | Gobi 2000 | AT&T ²³ | Finger 6 | vPro Pro 32 | Jan 10 |
| 2518-F3U | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA | LED | 2.0M | 250G 5400 | 11b/g/n | WWAN upg | | 6 | Pro 32 | Jan 10 |
| 2518-F6U | i5-520M | 2.40 | 2.93 | 4GB | 14.1" WXGA+ | LED | 2.0M | 80G SSD | Intel 6200 | WWAN upg | | Finger 9 | vPro Pro 32 | Jan 10 |
| 2518-4HU | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA | LED | 2.0M | 320G 7200 | Intel 6200 | WWAN upg | | Finger 6 | vPro Pro 32 | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB ® Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | |
| Widescreen display | <i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case color Case material | 14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> High Elasticity PolyCarbonate (HEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | |
| PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg Gobi™ 2000 | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | |
| Carrier Modem Bluetooth™ Ethernet | <i>Some:</i> AT&T®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator <i>Non-vPro model:</i> Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 <i>vPro model:</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | |
| Intel AMT Audio support | Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

| |
|---|
| Supports ThinkVantage® technologies |
| 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 |
| ThinkPlus 4-year LOR 9x5 NBD 45K6022 |
| ThinkPlus 5-year LOR 9x5 NBD 45K6024 |
| ThinkPlus 4-year P&L P/U Depot 45K6023 |
| ThinkPlus 5-year P&L P/U Depot 45K6025 |
| Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 7, 2010

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ThinkPad® T410 2516 (Discrete) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | CCFL or LED | Camera | Disk SATA GB ⁵ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Bat-tery cells | Intel vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|---------------------|-------------|--------|-------------------------------|-----------------------|---------------------|---------------------|------------|----------------|------------|---------|------------|
| 2516-AEU | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA | LED | 2.0M | 320G 7200 | 11b/g/n | None | None | Blue | 9 | No | Pro 32 | Jan 10 |

- This small and medium business (SMB) model is part of the US TopSeller™ Program

| | | |
|---|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display Camera | 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus | |
| Discrete graphics | NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case color Case material | 14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black <i>Top:</i> High Elasticity PolyCarbonate (HEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 5.0 hr; 9-cell: up to 8.3 hr; 9-cell plus Slice battery: up to 16.6 hr | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | |
| PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | |

See footnotes for important warranty information
 US model announced January 7, 2010

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 (NZ1-4) January 2010

ThinkPad® T410 2518 (Discrete) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Processor | Max | | Memory | Wide-screen display | CCFL or LED | Camera | Disk SATA GB ⁸ | rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Bat- tery Intel vPro | Preload | Avail date |
|------------|-----------|------------|-------------|--------|---------------------|-------------|--------|---------------------------|--------|--------------------------|-----------------------|---------------------|---------------------|----------------------|---------|------------|
| | | Base (GHz) | turbo (GHz) | | | | | | | | | | | | | |
| 2518-C5U | i5-540M | 2.53 | 3.06 | 2GB | 14.1" WXGA+ | LED | 2.0M | 128G SSD | DVD±RW | Intel 6200 ²⁸ | WWAN upg | Fing | 9 | vPro | XP Pro | Jan 10 |
| 2518-4JU | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA+ | LED | 2.0M | 320G 7200 | DVD±RW | Intel 6200 | WWAN upg | | 9 | vPro | XP Pro | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | | |
|--|---|--|---|
| Positioning Processor | Premiere performance; two spindles Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Presentation Director• ThinkVantage Productivity Center• Lenovo System Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | | |
| Widescreen display Camera | 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus | | |
| Discrete graphics | NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | |
| Dimensions ³ Weight ² Case color Case material | 14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black <i>Top:</i> High Elasticity PolyCarbonate (HEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 5.0 hr; 9-cell: up to 8.3 hr; 9-cell plus Slice battery: up to 16.6 hr | | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | |
| PCle Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCle Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCle x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | |
| Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | |

| | | | Supports ThinkVantage® technologies |
| | | | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378 |
| | | | ThinkPlus™, ²² 3-year LOR²⁴ 9x5 NBD 45K6021 |
| | | | ThinkPlus 4-year LOR 9x5 NBD 45K6022 |
| | | | ThinkPlus 5-year LOR 9x5 NBD 45K6024 |
| | | | ThinkPlus 4-year P&L P/U Depot 45K6023 |
| | | | ThinkPlus 5-year P&L P/U Depot 45K6025 |
| | | | Post-warranty annual maintenance agreements at **lenovo.com/thinkplus/warranty** |

See footnotes for important warranty information

US model announced March 2, 2010; previous model on January 7, 2010

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(NZ1-5) March 2010

ThinkPad® T410 2518 (Discrete) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | Max Base (GHz) | turbo (GHz) | Memory | Wide-screen display | CCFL or LED | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Blue/ Fing | Intel vPro | Preload | Avail date |
|------------|-----------|----------------|-------------|------------|---------------------|-------------|--------|-------------------------------|--------------------------|---------------------|-----------------------|------------|------------|---------|------------|
| 2518-C4U | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA+ | LED | 2.0M | 320G 7200 | 11b/g/n | Gobi 2000 | Verizon ¹⁶ | Yes | | Pro 32 | Jan 10 |
| 2518-F5U | i5-540M | 2.53 | 3.06 | 4GB | 14.1" WXGA+ | LED | 2.0M | 500G 7200 | WiMAX | WWAN upg | | Yes | vPro | Pro 32 | Jan 10 |
| 2518-4KU | i5-520M | 2.40 | 2.93 | 4GB | 14.1" WXGA+ | LED | 2.0M | 320G 7200 | Intel 6200 ²⁸ | Gobi 2000 | Verizon | Yes | vPro | Pro 64 | Mar 10 |
| 2518-4LU | i5-540M | 2.53 | 3.06 | 4GB | 14.1" WXGA+ | LED | 2.0M | 320G 7200 | WiMAX | WWAN upg | | Yes | vPro | Pro 64 | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | | | | | | | | | | Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 | | | | |
| Memory | 2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB⁸ (7200 rpm) or 500GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | | | |
| Widescreen display | 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | | | | | |
| Discrete graphics | NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | | |
| Touchpad | UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch | | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | | |
| Dimensions ³ | 14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm | | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) | | | | | | | | | | | | | | |
| Case color | Black | | | | | | | | | | | | | | |
| Case material | <i>Top:</i> High Elasticity PolyCarbonate (HEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell: up to 5.0 hr; 9-cell: up to 8.3 hr; 9-cell plus Slice battery: up to 16.6 hr | | | | | | | | | | | | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | | | | | | | | | | | | | |
| ExpressCard/34 | One slot (ExpressCard/34) | | | | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | | | | |
| Multicard reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | | | | | | | | | | | | | | |
| Ports | Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX | | | | | | | | | | | | | | |
| WWAN upg | <i>Some:</i> Wireless WAN upgradable | | | | | | | | | | | | | | |
| Gobi™ 2000 | <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | | | | | | | | | | | | |
| Carrier | <i>Some:</i> Verizon®, contract required with service provider | | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | | |
| Ethernet | <i>Non-vPro model:</i> Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 <i>vPro model:</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | |
| Fingerprint reader | UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | |

See footnotes for important warranty information

US models announced March 2, 2010; previous models on January 7, 2010

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ThinkPad® T410i 2516 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | CCFL or LED | Camera | Disk SATA GB ^a rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Finger print reader | Blue-tooth | Bat-tery cells | Intel vPro | Preload | Avail date |
|------------|-----------|------|--------|---------------------|-------------|--------|-------------------------------|-----------------------|---------------------|--------------------|---------------------|------------|----------------|------------|---------|------------|
| 2516-APU | i3-330M | 2.13 | 2GB | 14.1" WXGA | LED | 2.0M | 250G 5400 | Intel 1000 | | | | | 6 | No | XP Pro | Feb 10 |
| 2516-ARU | i3-330M | 2.13 | 2GB | 14.1" WXGA | LED | 2.0M | 320G 7200 | Intel 1000 | | | Finger | Blue | 6 | No | XP Pro | Feb 10 |
| 2516-BQU | i3-330M | 2.13 | 2GB | 14.1" WXGA | LED | 2.0M | 250G 5400 | Intel 1000 | Gobi 2000 | AT&T ²³ | | | 6 | No | XP Pro | Apr 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | |
|---|--|--|---|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Presentation Director• ThinkVantage Productivity Center• Lenovo System Toolbox• Adobe® Reader®• Skype™ for Windows• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB ⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | |
| Widescreen display | 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio | | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | |
| Dimensions ³ | 14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm | | | |
| Weight ² | 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) | | | |
| Case color | Black | | | |
| Case material | <i>Top:</i> High Elasticity PolyCarbonate (HEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | |
| Battery - type | Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom | | | |
| Battery - life ¹⁰ | 6-cell: up to 6.6 hr; 9-cell: up to 11 hr; 9-cell plus Slice battery: up to 22 hr | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | | |
| ExpressCard/34 | One slot (ExpressCard/34) | | | |
| Smart Card read | None | | | |
| Multicard reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | | | |
| Ports | Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | |
| Intel 1000 | 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 | | | |
| Gobi™ 2000 | <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | |
| Carrier | <i>Some:</i> AT&T®, contract required with service provider | | | |
| Modem | 56K V.92 ⁶ modem | | | |
| Bluetooth™ | <i>Some:</i> Bluetooth 2.1 wireless, LED indicator | | | |
| Ethernet | Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | |
| Fingerprint reader | <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | |
| | | | Supports ThinkVantage® technologies | |
| | | | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | |
| | | | ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 | |
| | | | ThinkPlus 2-year LOR 9x5 NBD 45K5969 | |
| | | | ThinkPlus 3-year LOR 9x5 NBD 45K5970 | |
| | | | ThinkPlus 4-year LOR 9x5 NBD 45K5973 | |
| | | | ThinkPlus 5-year LOR 9x5 NBD 45K5975 | |
| | | | ThinkPlus 2-year P&L P/U Depot 45K5971 | |
| | | | ThinkPlus 3-year P&L P/U Depot 45K5972 | |
| | | | ThinkPlus 4-year P&L P/U Depot 45K5974 | |
| | | | ThinkPlus 5-year P&L P/U Depot 45K5976 | |
| | | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | |

See footnotes for important warranty information

US model announced April 6, 2010; previous models on February 2, 2010

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ThinkPad® T410i 2516 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | CCFL or LED | Camera | Disk SATA GB ⁸ | rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Bat-tery Intel vPro | Preload | Avail date |
|------------|-----------|------|--------|---------------------|-------------|--------|---------------------------|------|--------------|-----------------------|---------------------|---------------------|------------|---------------------|---------|---------------|
| 2516-AQU | i3-330M | 2.13 | 2GB | 14.1" WXGA | LED | 2.0M | 250G | 5400 | DVD±RW | Intel 1000 | None | None | None | 6 | No | Pro 32 Feb 10 |

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 | | | | | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | | | | |
| Widescreen display | 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | | | | | | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | Supports ThinkVantage® technologies | | | | | |
| Dimensions ³ | 14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm | | | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) | | | | | | | | | | | | | | | |
| Case color | Black | | | | | | | | | | | | | | | |
| Case material | <i>Top:</i> High Elasticity PolyCarbonate (HEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom | | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell: up to 6.6 hr; 9-cell: up to 11 hr; 9-cell plus Slice battery: up to 22 hr | | | | | | | | | | | | | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | | | | | | | | | | | | | | |
| ExpressCard/34 | One slot (ExpressCard/34) | | | | | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | | | | | |
| Multicard reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | | | | | | | | | | | | | | | |
| Ports | Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | | | |
| Intel 1000 | 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 | | | | | | | | | | | | | | | |
| WWAN upg | None | | | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | | | |
| Bluetooth™ | None | | | | | | | | | | | | | | | |
| Ethernet | Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | | |
| Fingerprint reader | None | | | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | | |

See footnotes for important warranty information
US model announced February 2, 2010

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Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann | 06/23/09 |

Ultrabay Slim 9.5mm

| | | | |
|--|---------|-----|----------|
| Serial ATA Hard Drive Bay Adapter III | 43N3412 | ann | 06/23/09 |
| DVD Burner Ultrabay Slim Drive II SATA 1.5Gb/s | 43N3229 | ann | 06/23/09 |
| Ultrabay Slim Blu-ray Burner II (SATA) | 43N3230 | ann | 06/23/09 |

Storage and removable storage

| | | | |
|--|---------|-----|----------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann | 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann | 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann | 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann | 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann | 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann | 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann | 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann | 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

| | | | |
|--|---------|-----|----------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann | 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover) | 43N3417 | ann | 06/23/09 |

| | | | |
|-------------------------------------|---------|-----|----------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |

| | | | |
|---|---------|-----|----------|
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | | |
|---|---------|-----|----------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann | 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann | 01/07/10 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |
| ThinkPad Port Replicator Series 3 | 433610W | ann | 06/23/09 |
| ThinkPad Mini Dock Series 3 | 433710U | ann | 06/23/09 |
| ThinkPad Mini Dock Plus Series 3 | 433810U | ann | 06/23/09 |
| ThinkPad Mini Dock Plus Series 3 - Mobile WS | 433820U | ann | 01/07/10 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|--|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Security

| | | | |
|--|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |
| ThinkPad T400/T410/R400 Privacy Filter | 43R2472 | ann | 08/05/08 |

Note: ThinkPad T400/T410/R400 Privacy Filter (43R2472) is not supported on T400s or T410s.

Batteries

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 55+ (6-cell) | 57Y4185 | ann | 03/30/10 |
| ThinkPad Battery 55++ (9-cell) | 57Y4186 | ann | 03/30/10 |
| ThinkPad Battery 27++ (9-cell, slice) ⁴³ | 57Y4545 | ann | 01/07/10 |

⁴³ To be used along with system battery for all-day computing; attaches under ThinkPad using docking connector (not supported when using Series 3 Port Replicator or Docks).

| | | | |
|-----------------------------------|---------|-----|----------|
| ThinkPad External Battery Charger | 40Y7625 | ann | 09/20/05 |
|-----------------------------------|---------|-----|----------|

More information at www.lenovo.com/alldaycomputing

| | | | |
|---------------------------------------|---------|-----|----------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann | 01/05/06 |
|---------------------------------------|---------|-----|----------|

| | | | |
|----------------------------------|---------|-----|----------|
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | | |
|-------------------------------------|---------|-----|----------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 14" widescreen models:

| | | | |
|--------------------------|---------|-----|----------|
| ThinkPad 14W Case Sleeve | 57Y4294 | ann | 03/16/10 |
|--------------------------|---------|-----|----------|

Up to 15.4" widescreen models:

| | | | |
|---|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Up to 15.6" widescreen models:

| | | | |
|------------------------------------|---------|-----|----------|
| Wenger Backpack for Lenovo | 57Y4271 | ann | 01/07/10 |
| Wenger Slim Case for Lenovo | 57Y4272 | ann | 01/07/10 |
| Wenger Deluxe Slim Case for Lenovo | 57Y4273 | ann | 01/07/10 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |

Monitor Accessories⁴⁶

| | | | |
|---|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable | 57Y4393 | ann | 08/04/09 |
| DisplayPort to Single-link DVI-D Cable | 45Y7915 | ann | 08/05/08 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T400s



Lenovo ThinkPad T400s with
ThinkPad Mini Dock Series 3
433710U



ThinkPad Mini Dock Plus Series 3
433810U



ThinkPad Battery 59+ (6-cell)
51J0497



Lenovo ThinkPad T400s



Lenovo ThinkPad T400s

ThinkPad® T400s 2808 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Cam- era | Integrated graphics | Disk SATA GB ³ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue- tooth | Card slot | Preload | Avail date |
|-----------------|----------------|-----|-------------|----------------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|---------------------------|----------------|--------------|---------|---------------|
| 2808-DHUSP9400 | 2.40 | 2GB | 14.1" WXGA+ | | | GMA 120G | 5400 | DVD±RW | ❖ Intel 5100 ²⁸ | WWAN | upg | None | Fing | Express | XPP | Oct 09 |
| 2808-DJU SP9400 | 2.40 | 2GB | 14.1" WXGA+ | | | GMA 250G | 5400 | DVD±RW | ❖ Intel 5100 | WWAN | upg | None | Fing | Express | XPP | Oct 09 |
| 2808-DKUSP9400 | 2.40 | 2GB | 14.1" WXGA+ | | Cam | GMA 128G | SSD | DVD±RW | ❖ Intel 5100 | WWAN | upg | None | Fing | Express | XPP | Nov 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|---|--|--|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ 2 Duo processor SP9400 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache | | | | | | | | | | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | | | | | | | | | | | | | |
| Widescreen display | 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | | | | |
| Camera | | | | | | | | | | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915) | | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ | 14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 3.9 lb (1.77kg) | | | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell: up to 5.5 hr; 6-cell plus Ultrabay battery: up to 8.5 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) | | | | | | | | | | | Supports ThinkVantage® technologies | | |
| ExpressCard/34 | One slot (ExpressCard/34) | | | | | | | | | | | | | |
| Smart Card Read | None | | | | | | | | | | | | | |
| Multicard Reader | None | | | | | | | | | | | | | |
| Ports | Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | | | | | | | | | | | | | |
| Mini PCI Express | Three Mini PCI Express slots | | | | | | | | | | | | | |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | | | | | | | | | | | | |
| WWAN upg | Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) | | | | | | | | | | | | | |
| 2G Turbo | None | | | | | | | | | | | | | |
| UWB | None | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | |
| Bluetooth™ | <i>Some:</i> Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | |
| Ethernet | Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | | | |
| Security | Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | | | | | | | | | | | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | |

See footnotes for important warranty information ❖ Intel Centrino® 2 with vPro™ technology
 US model announced November 3, 2009; previous models on October 22, 2009

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 (SN1-5) December 2009

ThinkPad® T400s 2808 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue- tooth | Card slot | Preload | Avail date |
|-----------------|----------------|-----|--------|----------------------------|-------------|------------------------|-------------------------------------|---------------------------|---------------------------------|-------------------|------------------------------|---------------------------|----------------|--------------|---------|---------------|
| 2808-DLU SP9600 | 2.53 | 4GB | 14.1" | WXGA+ | Cam | GMA 128G SSD | DVD±RW | ±Intel 5100 ²⁸ | AT&T ²³ | None | Fing | Blue | Express | Pro 64 | Nov 09 | |

• This small and medium business (SMB) model is part of the US TopSeller™ Program

| | | |
|--|--|--|
| Positioning Processor | Premiere performance and ultraportability; two spindles Intel® Core™ 2 Duo processor SP9600 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) |
| Memory | 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high, removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | |
| Widescreen display | 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | 14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm | |
| Weight ² | <i>6-cell:</i> starting at 3.9 lb (1.77kg) | |
| Case material | <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | |
| Battery - life ¹⁰ | <i>6-cell:</i> up to 5.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.5 hr | |
| Chipset | Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) One slot (ExpressCard/34) | |
| ExpressCard/34 | None | |
| Smart Card Read | None | |
| Multicard Reader | None | |
| Ports | Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | |
| Mini PCI Express | Three Mini PCI Express slots | |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | |
| AT&T ²³ | Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T® | |
| 2G Turbo | None | |
| UWB | None | |
| Modem | None | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | |
| Ethernet | Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 | |
| Intel AMT | Intel Active Management Technology (iAMT) | |
| Audio support | High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security | Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

| Supports ThinkVantage® technologies | |
| 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378 | |
| ThinkPlus™. ²² 3-year LOR²⁴ 9x5 NBD 45K6021 | |
| ThinkPlus 4-year LOR 9x5 NBD 45K6022 | |
| ThinkPlus 5-year LOR 9x5 NBD 45K6024 | |
| ThinkPlus 4-year P&L P/U Depot 45K6023 | |
| ThinkPlus 5-year P&L P/U Depot 45K6025 | |
| Post-warranty annual maintenance agreements at **lenovo.com/thinkplus/warranty** | |

See footnotes for important warranty information
US model announced November 3, 2009

✦ Intel Centrino® 2 with vPro™ technology

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(SN1-6) March 2010

Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann 06/23/09 |

Ultrabay Slim 9.5mm

| | | |
|---|---------|--------------|
| Serial ATA Hard Drive Bay Adapter III | 43N3412 | ann 06/23/09 |
| DVD Burner Ultrabay Slim Drive II SATA 1.5G/s | 43N3229 | ann 06/23/09 |
| Ultrabay Slim Blu-ray Burner II (SATA) | 43N3230 | ann 06/23/09 |

Storage and removable storage

| | | |
|--|---------|--------------|
| 1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm) | 43N3418 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (5400 rpm) ⁵¹ | 43N3420 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁵¹ | 43N3423 | ann 01/07/10 |

⁵¹ Can be used with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in the Ultrabay

| | | |
|--|---------|--------------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) ⁴⁹ | 43N3406 | ann 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover) ⁴⁹ | 43N3417 | ann 06/23/09 |

⁴⁹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in Ultrabay via the removable adaptive cover provided with the drive

| | | |
|-------------------------------------|---------|--------------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |

| | | |
|---|---------|--------------|
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Wireless WAN (Mini PCI Express)

| | | |
|--|---------|--------------|
| Verizon® WWAN HSPA Broadband Mini PCIe | 43R9151 | ann 08/05/08 |
| AT&T® WWAN HSPA Broadband Mini PCIe | 43R9152 | ann 08/26/08 |

ThinkPad Expansion

| | | |
|--|---------|--------------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann 07/28/09 |
| ThinkPad Port Replicator Series 3 | 433610W | ann 06/23/09 |
| ThinkPad Mini Dock Series 3 | 433710U | ann 06/23/09 |
| ThinkPad Mini Dock Plus Series 3 | 433810U | ann 06/23/09 |
| ThinkPad Mini Dock Plus Series 3 (Mobile WS) | 433820U | ann 01/07/10 |

Keyboard

| | | |
|---|---------|--------------|
| TrackPoint Cap Collection | 73P2698 | ann 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

Mouse

| | | |
|--|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann 01/22/08 |

Security

| | | |
|-------------------------------------|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

Multimedia

| | | |
|----------------------------|---------|--------------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|----------------------------|---------|--------------|

Modem

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|----------------------|---------|--------------|
| USB 2.0 Lenovo Modem | 43R1814 | ann 02/26/08 |
|----------------------|---------|--------------|

Batteries

| | | |
|--|---------|--------------|
| ThinkPad Battery 59+ (6-cell) | 51J0497 | ann 06/23/09 |
| ThinkPad Battery 42 (3-cell, bay) ⁴³ | 57Y4536 | ann 08/25/09 |
| ⁴³ Used in Ultrabay Slim bay. | | |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann 09/20/05 |
| ⁴⁴ Requires the <i>ThinkPad 90W AC Adapter</i> 40Y7659 or the adapter provided with the system. | | |

More information at www.lenovo.com/alldaycomputing

| | | |
|--|---------|--------------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann 01/05/06 |
| ⁴⁵ Only compatible with the integrated graphics models. | | |
| ThinkPad 90W AC Adapter | 40Y7659 | ann 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | |
|--------------------------------------|---------|--------------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann 01/06/09 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 14" widescreen models:

| | | |
|--------------------------|---------|--------------|
| ThinkPad 14W Case Sleeve | 57Y4294 | ann 03/16/10 |
|--------------------------|---------|--------------|

Up to 15.4" widescreen models:

| | | |
|---|---------|--------------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann 05/13/08 |

Up to 15.6" widescreen models:

| | | |
|------------------------------------|---------|--------------|
| Wenger Backpack for Lenovo | 57Y4271 | ann 01/07/10 |
| Wenger Slim Case for Lenovo | 57Y4272 | ann 01/07/10 |
| Wenger Deluxe Slim Case for Lenovo | 57Y4273 | ann 01/07/10 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

Monitor Accessories⁴⁶

| | | |
|---|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable | 57Y4393 | ann 08/04/09 |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | ann 08/05/08 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann 09/22/09 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T410s



Lenovo ThinkPad T410s



ThinkPad Battery 42 (3-cell, bay)
57Y4536



ThinkPad Battery 59+ (6-cell)
51J0497



Lenovo ThinkPad T410s



Lenovo ThinkPad T410s

ThinkPad® T410s 2901 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Processor | Max Base turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Fing/Blue | Card slot | Intel vPro | Preload | Avail date |
|------------|-----------|----------------------|--------|---------------------|-------------|-------------------------------|--------------|-----------------------|--------------------------|-----------|-----------|------------|-------------|------------|
| 2901-A3U | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA+ | 2.0M | 250G 5400 | DVD±RW | 11b/g/n | WWAN upg | Yes | Express | XP Pro | Feb 10 |
| 2901-A4U | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA+ | 2.0M | 80G SSD | DVD±RW | Intel 6200 ²⁸ | WWAN upg | Yes | Express | vPro XP Pro | Feb 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | | | | | | | | | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | | | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | | | | | | | | | | | | | |
| Widescreen display | 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | | | | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Dimensions ³ Weight ² Case material | 14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | | | | | | | | | | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr | | | | | | | | | | | | | |
| Chipset ExpressCard/34 Multicard Reader Ports | Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | | | | | | | | | | ThinkPlus™. 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 | | | |
| PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable | | | | | | | | | | | | | |
| Modem Bluetooth™ Ethernet | None Bluetooth 2.1 wireless, LED indicator <i>Non-vPro model:</i> Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 <i>vPro model:</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | | | | | | | | | | | |
| Intel AMT Audio support | Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | | |

See footnotes for important warranty information
US models announced January 7, 2010

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(SN2-1) January 2010

ThinkPad® T410s 2904 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Processor | Max turbo | | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Finger print reader | Blue-tooth | Card slot | Intel vPro | Preload | Avail date |
|------------|-----------|------------|-------|--------|---------------------|--------|-------------------------------|--------------------------|---------------------|--------------------|---------------------|------------|-----------|------------|---------|------------|
| | | Base (GHz) | (GHz) | | | | | | | | | | | | | |
| 2904-CFU | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA+ | 2.0M | 250G 5400 | 11b/g/n | WWAN upg | | Finger | | Exp | | XP Pro | Feb 10 |
| 2904-CGU | i5-520M | 2.40 | 2.93 | 2GB | 14.1" WXGA+ | 2.0M | 128G SSD | 11b/g/n | WWAN upg | | Finger | Blue | Exp | | XP Pro | Feb 10 |
| 2904-FPU | i5-520M | 2.40 | 2.93 | 4GB | 14.1" WXGA+ | 2.0M | 128G SSD | Intel 6200 ²⁸ | Gobi 2000 | AT&T ²³ | Finger | Blue | Exp | vPro | XP Pro | Feb 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | | | | | | | | | | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | | | | | | | | | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | | | | |
| Memory | 2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Lenovo System Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | | | | | | | | | | | | | | |
| Widescreen display | 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | | | | | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915) | | | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | | |
| Touchpad | UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch | | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | | |
| Dimensions ³ | 14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm | | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 3.94 lb (1.79kg) | | | | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell: up to 4.8 hr; 6-cell plus Ultrabay battery: up to 7.9 hr | | | | | | | | | | | | | | |
| Chipset | Mobile Intel QS57 Express Chipset | | | | | | | | | | | | | | |
| ExpressCard/34 | One slot (ExpressCard/34) | | | | | | | | | | | | | | |
| Multicard Reader | None | | | | | | | | | | | | | | |
| Ports | Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | | |
| 11b/g/n | <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card | | | | | | | | | | | | | | |
| Intel 6200 ²⁸ | <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 | | | | | | | | | | | | | | |
| WWAN upg | <i>Some:</i> Wireless WAN upgradable | | | | | | | | | | | | | | |
| Gobi™ 2000 | <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | | | | | | | | | | | | |
| Carrier | <i>Some:</i> AT&T®, contract required with service provider | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | |
| Bluetooth™ | <i>Some:</i> Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | | |
| Ethernet | <i>Non-vPro model:</i> Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 <i>vPro model:</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | |
| Fingerprint reader | UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | |

See footnotes for important warranty information

US model announced February 2, 2010; previous models on January 7, 2010

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(SN2-2) February 2010

ThinkPad® T410s 2904 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | Max Base (GHz) | turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Card slot | Intel vPro | Preload | Avail date |
|------------|-----------|----------------|-------------|--------|---------------------|--------|-------------------------------|--------------------------|---------------------|---------------------|------------|-----------|------------|---------|------------|
| 2904-FZU | i5-520M | 2.40 | 2.93 | 4GB | 14.1" WXGA+ | 2.0M | 128G SSD | Intel 6200 ²⁸ | WWAN upg | Finger | Blue | Express | vPro | Pro 64 | Mar 10 |

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has a depot repair service 3-year limited warranty

| | | |
|---|--|---|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high, removable, upgradable, supports 2nd disk, Shock mounted storage | |
| Widescreen display | 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | 14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr | |
| Battery - type Battery - life ¹⁰ | | |
| Chipset ExpressCard/34 Multicard Reader Ports | Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information
US model announced March 2, 2010

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(SN2-7) March 2010

ThinkPad® T410s 2904 (Switchable) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Card slot | Intel vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|---------------------|--------|-------------------------------|--------------------------|---------------------|---------------------|------------|-----------|------------|---------|------------|
| 2904-G2U | i5-520M | 2.40 | 2.93 | 4GB | 14.1" WXGA+ | 2.0M | 128G SSD | Intel 6200 ²⁸ | WWAN upg | Finger | Blue | 3-in-1 | vPro | Pro 64 | Mar 10 |

- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This model has a depot repair service 3-year limited warranty**

| | | |
|---|---|---|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high, removable, upgradable, supports 2nd disk, Shock mounted storage | |
| Widescreen display Camera | 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, Camera on top of screen, 2.0-megapixel, fixed focus | |
| Switchable graphics | Dynamic switching between discrete and integrated graphics (user selectable), Intel HD Graphics in processor, and NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2048x1536 (VGA) @75Hz(integrated) or 85Hz(discrete); 1920x1200@60Hz (single-link DVI-D via cable 45J7915); 2560x1600 (DP) @60Hz | Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | 14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr | |
| Chipset ExpressCard/34 Multicard Reader Ports | Mobile Intel QS57 Express Chipset None 3-in-1 reader (MMC, SD, SDHC) Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

See footnotes for important warranty information
US model announced March 30, 2010

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(SN2-8) April 2010

ThinkPad® T410si 2901 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Card slot | Intel vPro | Preload | Avail date |
|------------|-----------|------|--------|---------------------|--------|-------------------------------|--------------|-----------------------|---------------------|---------------------|------------|-----------|------------|---------|------------|
| 2901-AKU | i3-330M | 2.13 | 2GB | 14.1" WXGA+ | 2.0M | 250G 5400 | DVD±RW | Intel 1000 | WWAN upg | None | Blue | Express | No | Pro 32 | Mar 10 |

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

| | | |
|--|---|--|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB ⁸ (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display Camera | 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | 14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr | |
| Chipset ExpressCard/34 Multicard Reader Ports | Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | lenovo.com/thinkplus/warranty |

See footnotes for important warranty information
US model announced March 2, 2010

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(SN2i-2) March 2010

ThinkPad® T410si 2904 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | Multi-Touch Screen | Cam-era | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Blue/Fing | Card slot | Intel vPro | Preload | Avail date |
|------------|-----------|------|--------|---------------------|--------------------|---------|-------------------------------|-----------------------|---------------------|-----------------------|-----------|-----------|------------|---------|------------|
| 2904-CUU | i3-330M | 2.13 | 2GB | 14.1" WXGA+ | Multi | 2.0M | 250G 5400 | Intel 1000 | WWAN upg | Verizon ¹⁶ | Yes | Express | No | Pro 32 | Feb 10 |
| 2904-CVU | i3-330M | 2.13 | 2GB | 14.1" WXGA+ | | 2.0M | 250G 5400 | Intel 1000 | Gobi 2000 | | Yes | Express | No | Pro 32 | Feb 10 |
| 2904-CWU | i3-330M | 2.13 | 3GB | 14.1" WXGA+ | | 2.0M | 80G SSD | Intel 1000 | WWAN upg | | Yes | Express | No | Pro 32 | Feb 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | |
|---|--|---|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | |
| Widescreen display | 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, <i>Some:</i> MultiTouch (touchscreen supports two-finger touch) | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | 14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr | |
| Chipset ExpressCard/34 Multicard Reader Ports | Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card Intel 1000 WWAN upg Gobi™ 2000 | Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | |
| Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> Verizon®, contract required with service provider None Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

| | | Supports ThinkVantage® technologies |
| | | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378 |
| | | ThinkPlus™.22 3-year LOR²⁴ 9x5 NBD 45K6021 |
| | | ThinkPlus 4-year LOR 9x5 NBD 45K6022 |
| | | ThinkPlus 5-year LOR 9x5 NBD 45K6024 |
| | | ThinkPlus 4-year P&L P/U Depot 45K6023 |
| | | ThinkPlus 5-year P&L P/U Depot 45K6025 |
| | | Post-warranty annual maintenance agreements at **lenovo.com/thinkplus/warranty** |

See footnotes for important warranty information
US models announced February 2, 2010

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Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann 06/23/09 |

Ultrabay Slim 9.5mm

| | | |
|---|---------|--------------|
| Serial ATA Hard Drive Bay Adapter III | 43N3412 | ann 06/23/09 |
| DVD Burner Ultrabay Slim Drive II SATA 1.5G/s | 43N3229 | ann 06/23/09 |
| Ultrabay Slim Blu-ray Burner II (SATA) | 43N3230 | ann 06/23/09 |

Storage and removable storage

| | | |
|--|---------|--------------|
| 1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm) | 43N3418 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (5400 rpm) ⁵¹ | 43N3420 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁵¹ | 43N3423 | ann 01/07/10 |

⁵¹ Can be used with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in the Ultrabay

| | | |
|--|---------|--------------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) ⁴⁹ | 43N3406 | ann 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover) ⁴⁹ | 43N3417 | ann 06/23/09 |

⁴⁹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in Ultrabay via the removable adaptive cover provided with the drive

| | | |
|-------------------------------------|---------|--------------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |

| | | |
|---|---------|--------------|
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Wireless WAN (Mini PCI Express)

| | | |
|---|---------|--------------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann 01/07/10 |

ThinkPad Expansion

| | | |
|--|---------|--------------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann 07/28/09 |
| ThinkPad Port Replicator Series 3 | 433610W | ann 06/23/09 |
| ThinkPad Mini Dock Series 3 | 433710U | ann 06/23/09 |
| ThinkPad Mini Dock Plus Series 3 | 433810U | ann 06/23/09 |
| ThinkPad Mini Dock Plus Series 3 - Mobile WS | 433820U | ann 01/07/10 |

Keyboard

| | | |
|---|---------|--------------|
| TrackPoint Cap Collection | 73P2698 | ann 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

Mouse

| | | |
|--|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann 01/22/08 |

Multimedia

| | | |
|----------------------------|---------|--------------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|----------------------------|---------|--------------|

Modem

| | | |
|----------------------|---------|--------------|
| USB 2.0 Lenovo Modem | 43R1814 | ann 02/26/08 |
|----------------------|---------|--------------|

Security

| | | |
|-------------------------------------|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

Batteries

| | | |
|---|---------|--------------|
| ThinkPad Battery 59+ (6-cell) | 51J0497 | ann 06/23/09 |
| ThinkPad Battery 42 (3-cell, bay) ⁴³ | 57Y4536 | ann 08/25/09 |
| ⁴³ Used in Ultrabay Slim bay. | | |
| ThinkPad External Battery Charger | 40Y7625 | ann 09/20/05 |

More information at www.lenovo.com/alldaycomputing

| | | |
|---------------------------------------|---------|--------------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann 01/05/06 |
|---------------------------------------|---------|--------------|

⁴⁵ Only compatible with the integrated graphics models.

| | | |
|----------------------------------|---------|--------------|
| ThinkPad 90W AC Adapter | 40Y7659 | ann 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | |
|-------------------------------------|---------|--------------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann 12/18/07 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 14" widescreen models:

| | | |
|--------------------------|---------|--------------|
| ThinkPad 14W Case Sleeve | 57Y4294 | ann 03/16/10 |
|--------------------------|---------|--------------|

Up to 15.4" widescreen models:

| | | |
|---|---------|--------------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann 05/13/08 |

Up to 15.6" widescreen models:

| | | |
|------------------------------------|---------|--------------|
| Wenger Backpack for Lenovo | 57Y4271 | ann 01/07/10 |
| Wenger Slim Case for Lenovo | 57Y4272 | ann 01/07/10 |
| Wenger Deluxe Slim Case for Lenovo | 57Y4273 | ann 01/07/10 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |

Monitor Accessories⁴⁶

| | | |
|---|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable | 57Y4393 | ann 08/04/09 |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | ann 08/05/08 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann 09/22/09 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T500



ThinkPad Business Topload Case
43R2476



Lenovo ThinkPad T500 with
T500/R500/W500 Series 15W Privacy Filter
43R2474



Lenovo ThinkPad T500



Lenovo ThinkPad T500



ThinkPad Battery 42 (3-cell, bay)
57Y4536

ThinkPad® T500 2242 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | CCFL or LED | Cam-era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue-tooth | Pre-load | Avail date |
|------------|-----------|------|--------|---------------------|-------------|---------|---------------------|-------------------------------|--------------|---------------------------|----------------|------------------------|---------------------|------------|----------|------------|
| 2242-8QU | P8600 | 2.40 | 2GB | 15.4" WXGA | LED | | GMA | 250G 5400 | DVD±RW | Intel 5100 ²⁸ | None | None | Fing | | XP Pro | Oct 09 |
| 2242-8RU | P8600 | 2.40 | 2GB | 15.4" WXGA | LED | Cam | GMA | 320G 5400 | DVD±RW | Intel 5100 | None | None | Fing | Blue | XP Pro | Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 1-year limited warranty

| | | | |
|-------------------------------------|--|--|---|
| Processor | Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• Fingerprint Software• Lenovo System Toolbox• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB ⁸ (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display | 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus | | |
| Camera | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | |
| Dimensions ³ | 6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm | | |
| Weight ² | 6-cell: starting at 5.9 lb (2.7kg) | | |
| Case color | Black | | |
| Case material | <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | | |
| Battery - life ¹⁰ | 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) | | |
| ExpressCard/54 | One slot (Type I, Type II), CardBus 32-bit | | |
| PC Card | None | | |
| Smart Card read | None | | |
| Multicard reader | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) | | |
| Ports | Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | |
| Mini PCI Express | Three Mini PCI Express slots | | |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | |
| WWAN upg | None | | |
| 2G Turbo | None | | |
| UWB | None | | |
| Modem | 56K V.92 ⁶ modem | | |
| Bluetooth™ | <i>Some:</i> Bluetooth 2.1 wireless, LED indicator | | |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | |
| Intel AMT | None | | |
| Audio support | High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | |

| | | | Supports ThinkVantage® technologies |
| | | | 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378 |
| | | | ThinkPlus™. ²² 1-year LOR²⁴ 9x5 NBD 45K5968 |
| | | | ThinkPlus 2-year LOR 9x5 NBD 45K5969 |
| | | | ThinkPlus 3-year LOR 9x5 NBD 45K5970 |
| | | | ThinkPlus 4-year LOR 9x5 NBD 45K5973 |
| | | | ThinkPlus 5-year LOR 9x5 NBD 45K5975 |
| | | | ThinkPlus 2-year P&L P/U Depot 45K5971 |
| | | | ThinkPlus 3-year P&L P/U Depot 45K5972 |
| | | | ThinkPlus 4-year P&L P/U Depot 45K5974 |
| | | | ThinkPlus 5-year P&L P/U Depot 45K5976 |
| | | | Post-warranty annual maintenance agreements at **lenovo.com/thinkplus/warranty** |

See footnotes for important warranty information
US models announced October 22, 2009

✦ Intel Centrino® 2 processor technology

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(CR5-15) October 2009

ThinkPad® T500 2242 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | CCFL or LED | Cam-era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue-tooth | Pre-load | Avail date |
|------------|-----------|------|--------|---------------------|-------------|---------|---------------------|-------------------------------|--------------|---------------------------|----------------|------------------------|---------------------|------------|----------|------------|
| 2242-8SU | P8600 | 2.40 | 2GB | 15.4" WXGA | LED | Cam | GMA | 320G 5400 | DVD±RW | Intel 5100 ²⁸ | None | None | Fing | Blue | Pro 32 | Oct 09 |

• This small and medium business (SMB) model is part of the US TopSeller™ Program

| | | | |
|-------------------------------------|--|--|--|
| Processor | Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage Power Manager• ThinkVantage System Update• Fingerprint Software• ThinkVantage Toolbox• Skype™ for Windows• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display | 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio | | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | |
| Dimensions ³ | <i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm | | |
| Weight ² | <i>6-cell:</i> starting at 5.9 lb (2.7kg) | | |
| Case color | Black | | |
| Case material | <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | | |
| Battery - life ¹⁰ | <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit | | Supports ThinkVantage® technologies |
| ExpressCard/54 | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) | | 65-watt (GMA graphics) AC adapter |
| PC Card | Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | ThinkPad Roll Cage and Top Cover |
| Smart Card read | | | Roll Cage (one-piece magnesium) |
| Multicard reader | | | Climate Savers® certified |
| Ports | | | EPEAT™ Gold rating |
| Mini PCI Express | Three Mini PCI Express slots | | ENERGY STAR® 5.0-compliant |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | RoHS-compliant |
| WWAN upg | None | | International Warranty Service ¹⁷ |
| 2G Turbo | None | | 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| UWB | None | | ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 |
| Modem | 56K V.92 ⁶ modem | | ThinkPlus 2-year LOR 9x5 NBD 45K5969 |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | ThinkPlus 3-year LOR 9x5 NBD 45K5970 |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | ThinkPlus 4-year LOR 9x5 NBD 45K5973 |
| Intel AMT | None | | ThinkPlus 5-year LOR 9x5 NBD 45K5975 |
| Audio support | High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | ThinkPlus 2-year P&L P/U Depot 45K5971 |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | ThinkPlus 3-year P&L P/U Depot 45K5972 |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | ThinkPlus 4-year P&L P/U Depot 45K5974 |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | ThinkPlus 5-year P&L P/U Depot 45K5976 |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information
US model announced October 22, 2009

Intel Centrino® 2 processor technology

© Lenovo
(CR5-16) October 2009

ThinkPad® T500 2243 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue- tooth | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|---------------------------|----------------|---------|---------------|
| 2243-93U | P8700 | 2.53 | 2GB | 15.4" WXGA | LED | Cam | GMA | 320G 7200 | DVD±RW | Intel 5100 ²⁸ | None | None | Finger | Blue | XP Pro | Oct 09 |
| 2243-95U | P8700 | 2.53 | 2GB | 15.4" WXGA | LED | Cam | GMA | 80G SSD | DVD±RW | Intel 5100 | None | None | Finger | Blue | XP Pro | Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|--|---|--|---|
| Processor | Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 80GB® Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive, | | |
| Widescreen display | 15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio | Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | |
| Dimensions ³ | 6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm | | |
| Weight ² | 6-cell: starting at 5.9 lb (2.7kg) | | |
| Case color | Black | | |
| Case material | Top: Super-Elastic Polycarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic | | |
| Battery - type | Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim | | |
| Battery - life ¹⁰ | 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) | | Supports ThinkVantage® technologies |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | |
| PC Card | One slot (Type I, Type II), CardBus 32-bit | | |
| Smart Card read | None | | |
| Multicard reader | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) | | |
| Ports | Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | |
| Mini PCI Express | Three Mini PCI Express slots | | ThinkPlus™. 22 3-year LOR ²⁴ 9x5 NBD |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | 45K6021 |
| WWAN upg | None | | ThinkPlus 4-year LOR 9x5 NBD |
| 2G Turbo | None | | 45K6022 |
| UWB | None | | ThinkPlus 5-year LOR 9x5 NBD |
| Modem | 56K V.92 ⁶ modem | | 45K6024 |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | ThinkPlus 4-year P&L P/U Depot |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | 45K6023 |
| Intel AMT | None | | ThinkPlus 5-year P&L P/U Depot |
| Audio support | High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | 45K6025 | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | Post-warranty annual maintenance agreements at | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | lenovo.com/thinkplus/warranty | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information
US models announced October 22, 2009

⚡ Intel Centrino® 2 processor technology

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(CR5-17) October 2009

ThinkPad® T500 2243 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Finger print reader | Blue- tooth | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-----------------------|------------------------------|---------------------------|----------------|---------|---------------|
| 2243-94U | P8700 | 2.53 | 2GB | 15.4" WXGA | LED | Cam | GMA | 320G 7200 | DVD±RW | ⇄ Intel 5100 ²⁸ | | None | Finger | Blue | Pro 32 | Oct 09 |
| 2243-9MU | P8700 | 2.53 | 2GB | 15.4" WXGA | LED | Cam | GMA | 320G 7200 | DVD±RW | ⇄ Intel 5100 | Verizon ¹⁶ | None | Finger | Blue | Pro 32 | Nov 09 |
| 2243-9PU | P8700 | 2.53 | 2GB | 15.4" WXGA | LED | Cam | GMA | 128G SSD | DVD±RW | ⇄ Intel 5100 | | None | Finger | Blue | Pro 32 | Nov 09 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Processor | Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 | | | | | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | | | | | | | | | | | | | | | |
| Widescreen display | 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio | | | | | | | | | | | | | | | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz | | | | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | | | |
| Dimensions ³ | 6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm | | | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 5.9 lb (2.7kg) | | | | | | | | | | | | | | | |
| Case color | Black | | | | | | | | | | | | | | | |
| Case material | <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim | | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr | | | | | | | | | | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit | | | | | | | | | | | | | | | |
| ExpressCard/54 | None | | | | | | | | | | | | | | | |
| PC Card | None | | | | | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | | | | | |
| Multicard reader | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) | | | | | | | | | | | | | | | |
| Ports | Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | | | |
| Mini PCI Express | Three Mini PCI Express slots | | | | | | | | | | | | | | | |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | | | | | | | | | | | | | | |
| Verizon ¹⁶ | Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with <u>Verizon®</u> | | | | | | | | | | | | | | | |
| 2G Turbo | None | | | | | | | | | | | | | | | |
| UWB | None | | | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | | | |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | | | | | | | | | | | | | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available | | | | | | | | | | | | | | | |

See footnotes for important warranty information

⇄ Intel Centrino® 2 processor technology

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US models announced November 3, 2009; previous model on October 22, 2009

(CR5-18) March 2010

ThinkPad® T500 2082 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Cam- era | Switchable graphics | Disk SATA GB ^a rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Bat- tery cells | Preload | Avail date |
|----------------|----------------|------|--------|----------------------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|--------------------|------------------------------|-----------------------|---------|---------------|
| 2082-BKU P8700 | P8700 | 2.53 | 3GB | 15.4" WSXGA+ | Cam | GMA, HD 3650 | 320G 7200 | DVD±RW | ±Intel 5100 ²⁸ | | | 9 | XP Pro | Oct 09 |
| 2082-BMU P8700 | P8700 | 2.53 | 3GB | 15.4" WSXGA+ | Cam | GMA, HD 3650 | 320G 7200 | DVD±RW | ±Intel 5100 | AT&T ²³ | | 9 | XP Pro | Oct 09 |
| 2082-BNU T9600 | T9600 | 2.80 | 4GB | 15.4" WSXGA+ | Cam | GMA, HD 3650 | 320G 7200 | DVD±RW | ±Intel 5100 | | | 9 | XP Pro | Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™,19 depot repair service 3-year limited warranty

| | | | | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | Premiere performance; two spindles Intel® Core™ 2 Duo processor P8700 or T9600 with dual-core , Intel HD Boost, 1066MHz system bus; P8700: 3MB L2 cache; T9600: 6MB L2 cache | | | | | | | | | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | | | |
| Memory | 3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | | |
| Widescreen display | 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio | | | | | | | | | | | | | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | | | |
| Switchable graphics | Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i> | | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ | 6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm | | | | | | | | | | | | | |
| Weight ² | 9-cell: starting at 6.2 lb (2.8kg) | | | | | | | | | | | | | |
| Case color | Black | | | | | | | | | | | | | |
| Case material | <i>Top:</i> Super-Elastic Polycarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 9-cell: up to 9.4 hr; 9-cell plus Ultrabay battery: up to 10.9 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| ExpressCard/54 | One slot (ExpressCard/34 or ExpressCard/54) | | | | | | | | | | | | | |
| PC Card | One slot (Type I, Type II), CardBus 32-bit | | | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | | | |
| Multicard reader | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) | | | | | | | | | | | | | |
| Ports | Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | |
| Mini PCI Express | Three Mini PCI Express slots | | | | | | | | | | | | | |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | | | | | | | | | | | | |
| WWAN upg | None | | | | | | | | | | | | | |
| AT&T ²³ | <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adapter, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T® | | | | | | | | | | | | | |
| 2G Turbo | None | | | | | | | | | | | | | |
| UWB | None | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | | | | | | | | | | | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades ²² available | | | | | | | | | | ThinkPlus™,22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | | |

See footnotes for important warranty information
US models announced October 22, 2009

• Intel Centrino® 2 processor technology

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(CR5-14) March 2010



Lenovo® ThinkPad W500



ThinkPad Advanced Mini Dock
250410U



Lenovo ThinkPad W500



Lenovo ThinkPad W500



Lenovo ThinkPad W500



Lenovo ThinkPad W500

ThinkPad® W500 4062 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Switchable graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Bat- tery cells | Preload | Avail date |
|------------|----------------|------|---------------------|----------------------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|-----------------------|---------|---------------|
| 4062-5DU | T9600 | 2.80 | 3GB | 15.4" WSXGA+ | GMA, V5700 | 320G 7200 | DVD±RW | Intel 5100 ²⁸ | WWAN upg | None | 9 | XP Pro | Oct 09 |
| 4062-5EU | T9900 | 3.06 | 3GB | 15.4" WUXGA | GMA, V5700 | 320G 7200 | DVD±RW | Intel 5100 | WWAN upg | None | 9 | XP Pro | Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- Power-packed engineering with Open GL graphics and ISV certifications

| | | |
|---|--|--|
| Positioning Processor | Mobile workstation; two spindles Intel® Core™ 2 Duo processor T9600 or T9900 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) |
| Memory | 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display | <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus | |
| Switchable graphics | Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm <i>9-cell:</i> starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One (Type I, Type II), CardBus 32-bit | Supports ThinkVantage® technologies 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| ExpressCard/54 PC Card Smart Card Reader Multicard Reader Ports | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | |
| Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | |
| Security Security chip Fingerprint reader | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

See footnotes for important warranty information
US models announced October 22, 2009

• Intel Centrino® 2 processor technology

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(CR5W-4) October 2009

ThinkPad® W500 4062 (Switchable) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Switchable graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe Bat- tery or Turbo cells | Preload | Avail date |
|------------|----------------|------|---------------------|----------------------------|------------------------|-------------------------------------|-----------------|---------------------------------|--------------------|---|---------|---------------|
| 4062-5FU | T9900 | 3.06 | 4GB | 15.4" WUXGA | GMA, V5700 | 320G 7200 | DVD±RW | Intel 5100 ²⁸ | AT&T ²³ | None | 9 | Oct 09 |
| 4062-5GU | T9900 | 3.06 | 4GB | 15.4" WUXGA | GMA, V5700 | 250G FDE | DVD±RW | Intel 5100 | WWAN upg | None | 9 | Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- Power-packed engineering with Open GL graphics and ISV certifications

| | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | Mobile workstation; two spindles Intel® Core™ 2 Duo processor T9900 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 | |
| Memory | 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) or 250GB (7200 rpm) Full Disk Encryption [FDE] / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | |
| Widescreen display Camera | 15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | |
| Switchable graphics | Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i> | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>9-cell:</i> starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr | | | | | | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One (Type I, Type II), CardBus 32-bit | | | | | | | | | | Supports ThinkVantage® technologies | |
| ExpressCard/54 PC Card Smart Card Reader Multicard Reader Ports | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | |
| Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³ | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adapter, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T | | | | | | | | | | | |
| 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 | |
| Security Security chip Fingerprint reader | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™, 19 depot repair service / service upgrades ²² available | | | | | | | | | | | |

See footnotes for important warranty information
US models announced October 22, 2009

✦ Intel Centrino® 2 processor technology

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Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann | 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann | 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann | 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann | 03/17/09 |
| 4GB PC3-8500 DDR3 SODIMM | 51J0493 | ann | 03/03/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann | 06/23/09 |

Ultrabay Slim 9.5mm

| | | | |
|---------------------------------------|---------|-----|----------|
| Serial ATA Hard Drive Bay Adapter III | 43N3412 | ann | 06/23/09 |
| DVD-ROM Ultrabay Slim SATA 1.5Gb/s | 43N3212 | ann | 08/05/08 |
| CD-RW/DVD-ROM Ultrabay Slim SATA | 43N3213 | ann | 08/05/08 |
| DVD Burner Ultrabay Slim SATA 1.5Gb/s | 43N3214 | ann | 08/05/08 |

Storage and removable storage

| | | | |
|--|---------|-----|----------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann | 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann | 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann | 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann | 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann | 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann | 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann | 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann | 01/07/10 |

⁴¹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in the Ultrabay

| | | | |
|--|---------|-----|----------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann | 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover) | 43N3417 | ann | 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | | |
|--|---------|-----|----------|
| Verizon® WWAN UNDP Broadband Mini PCIe | 43R9151 | ann | 08/05/08 |
| AT&T® WWAN HSPA Broadband Mini PCIe | 43R9152 | ann | 08/26/08 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |
| ThinkPad Advanced Mini Dock | 250410U | ann | 09/20/05 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|--|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Security

| | | | |
|--|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| T500/R500/W500 Series 15W Privacy Filter | 43R2474 | ann | 08/05/08 |
| USB Gemplus Smart Card Reader | 41N3040 | ann | 02/21/06 |
| PC Card Gemplus Smart Card Reader | 41N3004 | ann | 12/13/05 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann | 06/27/06 |

Batteries

| | | | |
|--|---------|-----|----------|
| ThinkPad Battery 41+ (6-cell) | 40Y6799 | ann | 01/05/06 |
| ThinkPad Battery 41++ (9-cell) | 40Y6797 | ann | 09/20/05 |
| ThinkPad Battery 42 (3-cell, bay) ⁴³ | 57Y4536 | ann | 08/25/09 |
| ⁴³ Used in Ultrabay Slim bay. | | | |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |
| ⁴⁴ Requires the <i>ThinkPad 90W AC Adapter</i> 40Y7659 or the adapter provided with the system. | | | |

More information at www.lenovo.com/alldaycomputing

| | | | |
|--|---------|-----|----------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann | 01/05/06 |
| ⁴⁵ Only compatible with the integrated graphics models. | | | |
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | | |
|--------------------------------------|---------|-----|----------|
| • Palm device charge tip (L7) | 41R4315 | ann | 12/18/07 |
| • BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.4" widescreen models:

| | | | |
|---|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|---|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable | 57Y4393 | ann | 08/04/09 |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | ann | 08/05/08 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |
| ⁴⁶ Compatible on selected Lenovo and ThinkVision monitors. | | | |

More information at www.lenovo.com/support/monitoraccessories

More infoFor more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

More infoOther accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T510



Lenovo ThinkPad T510



ThinkPad Mini Dock Plus Series 3
433810U



ThinkPad Battery 27++ (9-cell, slice)
57Y4545



Lenovo ThinkPad T510



Lenovo ThinkPad T510

ThinkPad® T510 4313 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Bat-tery Intel vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|---------------------|--------|-------------------------------|--------------|-----------------------|---------------------|---------------------|------------|---------------------|---------|---------------|
| 4313-28U | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD | 2.0M | 250G 5400 | DVD±RW | 11b/g/n | None | None | None | 6 | No | Pro 32 Jan 10 |

• This small and medium business (SMB) model is part of the US TopSeller™ Program

| | | |
|---|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Adobe® Reader®• Adobe Flash® Player• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display Camera | 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | Supports ThinkVantage® technologies |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | ThinkPlus™, ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 |
| PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 ⁶ modem None Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | |

See footnotes for important warranty information
 US model announced January 7, 2010

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 (KN1-1) January 2010

ThinkPad® T510 4314 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Finger print reader | Bat- toot h | Intel vPro | Preload | Availa bility date | |
|------------|-----------|------------|-----------------|--------|---------------------|--------|-------------------------------|--------------------------|---------------------|--------------------|---------------------|-------------|------------|---------|--------------------|--------|
| 4314-2LU | i5-540M | 2.53 | 3.06 | 3GB | 15.6" HD | 2.0M | 320G 7200 | Intel 6200 ²⁸ | Gobi 2000 | AT&T ²³ | Finger | Blue | 6 | vPro | XP Pro | Jan 10 |
| 4314-2KU | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD | 2.0M | 320G 7200 | Intel 1000 | WWAN upg | | | Blue | 6 | | XP Pro | Jan 10 |
| 4314-7NU | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD | 2.0M | 320G 7200 | Intel 6200 | WWAN upg | | Finger | Blue | 6 | vPro | XP Pro | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | | | | | | | | | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | | | | |
| Memory | 2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Lenovo System Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | | | |
| Widescreen display | 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | | | | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | | | | | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915) | | | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | | |
| Touchpad | UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch | | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | | |
| Dimensions ³ | 15.6" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm | | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg) | | | | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic | | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell: up to 6.2 hr; 9-cell: up to 10.4 hr; 9-cell plus Slice battery: up to 20.8 hr | | | | | | | | | | | | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | | | | | | | | | | | | | |
| ExpressCard/34 | One slot (ExpressCard/34) | | | | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | | | | |
| Multicard reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | | | | | | | | | | | | | | |
| Ports | Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | | | | | | | | | | | | |
| Carrier | <i>Some:</i> AT&T®, contract required with service provider | | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | | |
| Ethernet | <i>Non-vPro model:</i> Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 <i>vPro model:</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | |
| Fingerprint reader | <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr - battery depot repair service / service upgrades ²² available | | | | | | | | | | | | | | |

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 7, 2010

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(KN1-2) March 2010

ThinkPad® T510 4314 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Intel vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|---------------------|--------|-------------------------------|--------------|-----------------------|---------------------|---------------------|------------|------------|---------|------------|
| 4314-36U | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD | 2.0M | 320G 7200 | DVD±RW | WiMAX | WWAN upg | Finger | Blue | vPro | Pro 32 | Jan 10 |
| 4314-2JU | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD | 2.0M | 250G 5400 | DVD±RW | 11b/g/n | WWAN upg | | Blue | | Pro 32 | Jan 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | |
|---|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash™ Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB ⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display Camera | 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>15.6W"</i> (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | Supports ThinkVantage® technologies |
| PCIe Mini Card 11b/g/n WiMAX WWAN upg Modem Bluetooth™ Ethernet | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator <i>Non-vPro model:</i> Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 <i>vPro model:</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Intel AMT Audio support | Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Limited warranty ¹² | 3-years/1-yr - battery depot repair service / service upgrades ²² available | |

See footnotes for important warranty information
 US models announced January 7, 2010

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 (KN1-3) January 2010

ThinkPad® T510 4313 (Discrete) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Finger print reader | Blue-tooth | Bat-tery Intel vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|---------------------|--------|-------------------------------|--------------|-----------------------|---------------------|---------------------|------------|---------------------|---------|---------------|
| 4313-29U | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD | 2.0M | 320G 7200 | DVD±RW | 11b/g/n | None | None | Blue | 9 | No | Pro 32 Feb 10 |

• This small and medium business (SMB) model is part of the US TopSeller™ Program

| | | | | |
|---|--|--|---|--|
| Positioning Processor | Premiere performance; two spindles Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 | |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Adobe® Reader®• Skype™ for Windows• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | |
| Widescreen display Camera | 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus | | | |
| Discrete graphics | NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | Supports ThinkVantage® technologies | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr | | | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | ThinkPlus™, ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | |
| PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | |

See footnotes for important warranty information
US model announced January 7, 2010

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(KN1-4) January 2010

ThinkPad® T510 4314 (Discrete) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Finger print reader | Blue-tooth | Intel vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|---------------------|--------|-------------------------------|--------------------------|---------------------|-----------------------|---------------------|------------|------------|---------|------------|
| 4314-2NU | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD | 2.0M | 320G 7200 | Intel 6200 ²⁸ | Gobi 2000 | Verizon ¹⁶ | Finger | Blue | vPro | XP Pro | Feb 10 |
| 4314-7PU | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD+ | 2.0M | 320G 7200 | Intel 6200 | WWAN upg | | | Blue | vPro | XP Pro | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | |
|---|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Presentation Director• ThinkVantage Productivity Center• Lenovo System Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | |
| Discrete graphics | NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| PCIe Mini Card Intel 6200 ²⁸ WWAN upg Gobi™ 2000 | Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | |
| Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> Verizon®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Limited warranty ¹² | 3-years/1-yr - battery depot repair service / service upgrades²² available | |

See footnotes for important warranty information

US model announced March 2, 2010; previous model on January 7, 2010

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(KN1-5) March 2010

ThinkPad® T510 4314 (Discrete) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Bat- tery Intel Blue/ Fing cells vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|------------|---------------------|--------|-------------------------------|--------------|--------------------------|---------------------|---------------------------------------|---------|------------|
| 4314-2MU | i5-520M | 2.40 | 2.93 | 2GB | 15.6" HD | 2.0M | 250G 5400 | DVD±RW | Intel 1000 | WWAN upg | 9 | Pro 32 | Feb 10 |
| 4314-2PU | i5-540M | 2.53 | 3.06 | 4GB | 15.6" HD+ | 2.0M | 500G 7200 | DVD±RW | Intel 6200 ²⁸ | WWAN upg | 9 vPro | Pro 32 | Feb 10 |
| 4314-7QU | i5-520M | 2.40 | 2.93 | 4GB | 15.6" HD+ | 2.0M | 320G 7200 | DVD±RW | Intel 6200 | WWAN upg | 9 vPro | Pro 64 | Mar 10 |
| 4314-7RU | i5-540M | 2.53 | 3.06 | 4GB | 15.6" HD+ | 2.0M | 128G SSD | DVD±RW | Intel 6200 | WWAN upg | 9 vPro | Pro 64 | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a depot repair service 3-year limited warranty

| | | |
|---|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• Fingerprint Software (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 250GB (5400 rpm), 320GB (7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | |
| Discrete graphics | NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr | |
| Chipset ExpressCard/34 Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | |
| PCIe Mini Card Intel 1000 Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator <i>Non-vPro model:</i> Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 <i>vPro model:</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | |
| Intel AMT Audio support | Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr - battery depot repair service / service upgrades ²² available | Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information

US models announced March 2, 2010; previous models on January 7, 2010

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ThinkPad®



Lenovo® ThinkPad W510



Lenovo ThinkPad W510



ThinkPad Mini Dock Plus Series 3 - Mobile WorkStation
433820U



ThinkPad 135W AC Adapter
55Y9317



Lenovo ThinkPad W510



Lenovo ThinkPad W510

ThinkPad® W510 4319 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

| Type-model | Processor | Max Base (GHz) | Max turbo (GHz) | Memory (MHz) | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | RAID | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Color calib | Intel vPro | Preload | Avail date |
|------------|-----------|----------------|-----------------|--------------|---------------------|--------|-------------------------------|------|--------------------------|---------------------|-------------|------------|---------|------------|
| 4319-4CU | i7-720QM | 1.60 | 2.80 | 2GBx1 1066 | 15.6" HD+ | 2.0M | 320G 7200 | None | Intel 6300 ²⁸ | WWAN upg | None | vPro | XP Pro | Feb 10 |

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*
- *Power-packed engineering with Open GL graphics and ISV certifications*

| | | | |
|---|---|--|---|
| Positioning Processor | Mobile workstation; two spindles Intel® Core™ i7 processor i7-720QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; 6MB cache | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets | | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB ⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display | 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut | | |
| Color calibration | None | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | |
| Discrete graphics | NVIDIA® Quadro® FX880M , PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | |
| Touchpad | UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | |
| Dimensions ³ | 15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm | | |
| Weight ² | 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg) | | |
| Case material | <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic | | |
| Battery - type | Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom | | |
| Battery - life ¹⁰ | 6-cell: up to 3.0 hr; 9-cell: up to 5.1 hr; 9-cell plus slice battery: up to 10.5 hr | | |
| Chipset | Mobile Intel QM57 Express Chipset | | |
| ExpressCard/34 | One slot (ExpressCard/34) | | |
| Smart Card Read | None | | |
| Multicard Reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | | |
| Ports | Two USB 3.0, one Powered USB 2.0, one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | |
| Intel 6300 ²⁸ | 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 | | |
| WWAN upg | Wireless WAN upgradable | | |
| Modem | 56K V.92 ⁶ modem | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | |
| Ethernet | Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | |
| Fingerprint reader | UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | |

| |
|--|
| Supports ThinkVantage® technologies |
| 135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 41C9176 |
| ThinkPlus 4-year LOR 9x5 NBD 41C9177 |
| ThinkPlus 5-year LOR 9x5 NBD 41C9179 |
| ThinkPlus 4-year P&L P/U Depot 41C9178 |
| ThinkPlus 5-year P&L P/U Depot 41C9180 |
| Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information
US model announced February 2, 2010

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(KN1W-4) February 2010

ThinkPad® W510 4319 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | Max Base (GHz) | turbo (GHz) | Memory (MHz) | Wide-screen display | Multi-Touch Screen | Disk SATA GB ³ rpm | RAID | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Color calib | Intel vPro | Preload | Avail date |
|------------|-----------|----------------|-------------|--------------|---------------------|--------------------|-------------------------------|------|--------------------------|---------------------|--------------------|-------------|------------|---------|------------|
| 4319-2NU | i7-720QM | 1.60 | 2.80 | 2GBx1 1066 | 15.6" HD+ | | 320G 7200 | None | Intel 6300 ²⁸ | WWAN upg | | | vPro | Pro 32 | Jan 10 |
| 4319-2PU | i7-720QM | 1.60 | 2.80 | 2GBx2 1066 | 15.6" FHD | | 320G 7200 | None | Intel 6300 | WWAN upg | | | vPro | Pro 64 | Jan 10 |
| 4319-2QU | i7-720QM | 1.60 | 2.80 | 2GBx2 1066 | 15.6" FHD | | 320G 7200 | None | Intel 6300 | Gobi 2000 | | | vPro | Pro 64 | Jan 10 |
| 4319-2RU | i7-820QM | 1.73 | 3.06 | 2GBx2 1066 | 15.6" FHD | Multi | 320G 7200 | None | Intel 6300 | WWAN upg | | X-Rite | vPro | Pro 64 | Jan 10 |
| 4319-4BU | i7-720QM | 1.60 | 2.80 | 2GBx2 1066 | 15.6" FHD | | 320G 7200 | None | Intel 6300 | Gobi 2000 | AT&T ²³ | | vPro | Pro 64 | Feb 10 |
| 4319-4MU | i7-720QM | 1.60 | 2.80 | 2GBx2 1066 | 15.6" HD+ | | 320G 7200 | None | Intel 6300 | Gobi 2000 | AT&T | | vPro | Pro 64 | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- Power-packed engineering with Open GL graphics and ISV certifications

| | | | | |
|---|---|--|--|--|
| Positioning Processor | Mobile workstation; two spindles Intel® Core™ i7 processor i7-720QM or i7-820QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i7-720QM</i> : 6MB cache; <i>i7-820QM</i> : 8MB cache | | Preloaded operating system ²⁰ - <i>Some</i> : Genuine Windows® 7 Professional 32 - <i>Some</i> : Genuine Windows 7 Professional 64 | |
| Memory | 2GB or 4GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets | | Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite® (color calibration models) | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB ⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™ | | | |
| Widescreen display | <i>Some</i> : 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some</i> : 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight , 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut <i>Some</i> : 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight , 242 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut, MultiTouch (touchscreen supports two-finger touch) | | | |
| Color calibration Camera | <i>Some</i> : huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 2.0-megapixel, fixed focus | | | |
| Discrete graphics | NVIDIA® Quadro® FX880M , PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | |
| Dimensions (WxDxH) ³ | <i>HD+</i> : 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>FHD</i> : 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm <i>FHD MultiTouch</i> : 14.68" x 9.65" x 1.35-1.57"; 372.8mm x 245.1mm x 34.3-39.8mm <i>6-cell</i> : starting at 5.66 lb (2.57kg); <i>9-cell</i> : starting at 6.01 lb (2.72kg) | | | |
| Weight ² | <i>Display cover</i> : Glass-fiber reinforced plastic; <i>Base</i> : Carbon-fiber reinforced plastic | | | |
| Case material | Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom | | | |
| Battery - type | <i>6-cell</i> : up to 3.0 hr; <i>9-cell</i> : up to 5.1 hr; <i>9-cell plus slice battery</i> : up to 10.5 hr | | | |
| Battery - life ¹⁰ | | | | |
| Chipset ExpressCard/34 Smart Card Read Multicard Reader Ports | Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Two USB 3.0, one Powered USB 2.0, one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | Supports ThinkVantage® technologies | |
| PCIe Mini Card Intel 6300 ²⁸ WWAN upg Gobi™ 2000 | Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 <i>Some</i> : Wireless WAN upgradable <i>Some</i> : Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | 135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | |
| Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some</i> : AT&T®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | |

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 7, 2010 or February 2, 2010

US model withdrawn effective February 2010

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Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25Pack) | 57Y4386 | ann 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann 06/23/09 |
| 1GB PC3-10600 DDR3 L-H SODIMM | 55Y3709 | ann 03/02/10 |
| 1GB PC3-10600 DDR3 L-H SODIMM (25Pack) | 55Y4415 | ann 03/02/10 |
| 2GB PC3-10600 DDR3 L-H SODIMM | 55Y3710 | ann 03/02/10 |
| 2GB PC3-10600 DDR3 L-H SODIMM (25Pack) | 55Y4416 | ann 03/02/10 |
| 4GB PC3-10600 DDR3 L-H SODIMM | 55Y3711 | ann 03/02/10 |

Ultrabay Slim 9.5mm

| | | |
|---|---------|--------------|
| Serial ATA Hard Drive Bay Adapter III ⁴⁸ | 43N3412 | ann 06/23/09 |
|---|---------|--------------|

Ultrabay Enhanced 12.7mm

| | | |
|--|---------|--------------|
| DVD Burner Ultrabay Enhanced II SATA | 43N3294 | ann 01/07/10 |
| Blu-ray Reader / DVD Burner Ultrabay Enh | 43N3295 | ann 01/07/10 |

Storage and removable storage

| | | |
|--|---------|--------------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

| | | |
|--|---------|--------------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover) | 43N3417 | ann 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | |
|---|---------|--------------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann 01/07/10 |

ThinkPad Expansion

T510:

| | | |
|-----------------------------------|---------|--------------|
| ThinkPad Port Replicator Series 3 | 433610W | ann 06/23/09 |
| ThinkPad Mini Dock Series 3 | 433710U | ann 06/23/09 |
| ThinkPad Mini Dock Plus Series 3 | 433810U | ann 06/23/09 |

All:

| | | |
|--|---------|--------------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann 07/28/09 |
| ThinkPad Mini Dock Plus Series 3 - Mobile WS | 433820U | ann 01/07/10 |

Keyboard

| | | |
|---|---------|--------------|
| TrackPoint Cap Collection | 73P2698 | ann 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

Mouse

| | | |
|--|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann 01/22/08 |

Multimedia

| | | |
|----------------------------|---------|--------------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|----------------------------|---------|--------------|

Security

| | | |
|-------------------------------------|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

Batteries

| | | |
|---|---------|--------------|
| ThinkPad Battery 55+ (6-cell) | 57Y4185 | ann 03/30/10 |
| ThinkPad Battery 55++ (9-cell) | 57Y4186 | ann 03/30/10 |
| ThinkPad Battery 27++ (9-cell, slice) ⁴³ | 57Y4545 | ann 01/07/10 |

⁴³ To be used along with system battery for all-day computing; attaches under ThinkPad using docking connector (not supported when using Series 3 Port Replicator or Docks).

| | | |
|-----------------------------------|---------|--------------|
| ThinkPad External Battery Charger | 40Y7625 | ann 09/20/05 |
|-----------------------------------|---------|--------------|

More information at www.lenovo.com/alldaycomputing

T510:

| | | |
|---------------------------------------|---------|--------------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann 01/05/06 |
|---------------------------------------|---------|--------------|

⁴⁵ Only compatible with the integrated graphics models.

| | | |
|----------------------------------|---------|--------------|
| ThinkPad 90W AC Adapter | 40Y7659 | ann 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann 09/22/09 |

W510:

| | | |
|--------------------------|---------|--------------|
| ThinkPad 135W AC Adapter | 55Y9317 | ann 01/07/10 |
|--------------------------|---------|--------------|

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | |
|------------------------------------|---------|--------------|
| •Palm device charge tip (L7) | 41R4315 | ann 12/18/07 |
| •BlackBerry charge tip (L8a) | 41R4478 | ann 12/18/07 |
| •iPod and iPhone Charge Tip (L10a) | 41R4481 | ann 12/18/07 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.4" widescreen models:

| | | |
|--------------------------------|---------|--------------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann 05/01/07 |
| ThinkPad Business Backpack | 43R2482 | ann 05/13/08 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |

Monitor Accessories⁴⁶

| | | |
|---|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable | 57Y4393 | ann 08/04/09 |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | ann 08/05/08 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann 09/22/09 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad W700



Lenovo ThinkPad W700 with
ThinkPad W700 Mini Dock 2.0
57Y4345



ThinkPad 170W AC Adapter
41R4421



ThinkPad Battery 37++ (9-cell)
45J7914



Lenovo ThinkPad W700



Lenovo ThinkPad W700

| Type-model | Processor | GHz | Memory | Wide-screen display | Camera | Discrete graphics memory | Disk(s) SATA GB ⁸ rpm | RAID | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe UWB or Turbo | Card slot | Color calib | Digitizer | Preload | Avail date |
|--|---|------|--------|---------------------|--------|--------------------------|----------------------------------|------|--------------|---------------------------|------------------------|--|-------------|-----------|---------|------------|
| 2758-28U | T9400 | 2.53 | 1GB | 17" WXGA+ | Cam | 1GB | 2x160G 7200 | 0 | DVD±RW | Intel 5300 ²⁸ | | Smart | X-Rite | Wacom | Bus64 | Sep08 |
| 2758-4SU | T9600 | 2.80 | 4GB | 17" WUXGA | Cam | 512MB | 2x160G 7200 | | DVD±RW | Intel 5300 | 2G Turbo | Smart | X-Rite | | Bus64 | Sep08 |
| 2758-29U | X9100 | 3.06 | 4GB | 17" WUXGA | Cam | 1GB | 2x250G 5400 | 1 | DVD±RW | Intel 5300 | | Smart | X-Rite | Wacom | Bus64 | Sep08 |
| 2758-MPU | Q9000 | 2.00 | 4GB | 17" WUXGA | Cam | 512MB | 1x80G SSD | | DVD±RW | Intel 5300 | | /54 | | | Bus64 | Jun 09 |
| 2758-MWU | P8700 | 2.53 | 3GB | 17" WXGA+ | Cam | 512MB | 1x320G 7200 | | DVD±RW | Intel 5300 | | /54 | | | XP Pro | Oct 09 |
| 2758-MXU | T9900 | 3.06 | 4GB | 17" WUXGA | Cam | 512MB | 2x320G 7200 | | DVD±RW | Intel 5300 | | /54 | | | Bus64 | Oct 09 |
| • These small and medium business (SMB) models are part of the US TopSeller™ Program | | | | | | | | | | | | | | | | |
| Positioning Processor | Mobile workstation; three spindles Intel® Core™ 2 Duo processor P8700 with dual-core , Intel HD Boost, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Duo processor T9400, T9600 or T9900 with dual-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Quad processor Q9000 with quad-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Extreme processor X9100 with dual-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache | | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 64 ◇ Vista models: Vista Premium logo | | | | |
| Memory | 1GB, 3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™ PRO Monitor Color Correction by Pantone®/X-Rite® (color calibration models) | | | | |
| SATA DVD±RW Ultrabay Enhanced SATA disks | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some:</i> One disk, 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> One disk, 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>Some:</i> Two disks, 160GB (7200 rpm), 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports three disks max, Shock Mounted Hard Drive | | | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 17.0" (431.8mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio, 45% color gamut <i>Some:</i> 17.0" (431.8mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut <i>Some:</i> huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest | | | | | | | | | | | | | | | |
| Color calibration Camera | <i>Some:</i> Camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | | | | | |
| Discrete graphics | <i>Some:</i> NVIDIA® Quadro® FX2700M , PCI Express® x16, 512MB memory <i>Some:</i> NVIDIA Quadro FX3700M , PCI Express x16, 1GB memory <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort) | | | | | | | | | | | ISV software certifications Supports ThinkVantage® technologies | | | | |
| Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard <i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions | | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter | | | | |
| Dimensions ³ Weight ² Case material | <i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm <i>9-cell:</i> starting at 8.4 lb (3.8kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 9-cell <i>9-cell:</i> up to 2.3 hr | | | | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus One ExpressCard/34 <i>Some:</i> [54] One ExpressCard/34 or ExpressCard/54 None <i>Some:</i> Smart Card Reader 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | | | |
| Chipset | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 <i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator <i>Non-vPro model:</i> Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 <i>vPro model:</i> Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | | | | | | | | | | | |
| ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports | None <i>Some:</i> Smart Card Reader | | | | | | | | | | | | | | | |
| Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet | Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | | | | |
| Intel AMT Audio support Security Security chip Fingerprint reader | | | | | | | | | | | | 170-watt AC adapter ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | | | |
| Limited warranty ¹² | 3-year - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | | |

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

US models announced October 22, 2009; previous models on August 12, 2008 or June 2, 2009

US models withdrawn effective September 2008, December 2009, or February 2010

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(NIC1-1) November 2009

ThinkPad®



Lenovo® ThinkPad W700ds



Lenovo ThinkPad W700ds



Lenovo ThinkPad W700ds



ThinkPad 17W Business Topload Case
43R9117



Lenovo ThinkPad W700ds

ThinkPad® W700ds 2758 (TopSeller)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Primary display | Secondary display | Camera | Disk(s) SATA GB ^a | RAID | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe UWB or Turbo | Card Blue/ slot | Digit- izer | Workhorse (W) Global (G) Avail Preload date |
|----------------|----------------|-----|-----------|--------------------|----------------------|---------|------------------------------------|--------|--------------------------|---------------------------------|------------------------------|--------------------|----------------|---|
| 2758-MMU Q9000 | 2.00 | 4GB | 17" WUXGA | 10.6" WXGA | Cam | 2x320GB | 1 | DVD±RW | Intel 5300 ²⁸ | None | /54 | Yes | Wacom | Bus64 No Mar 09 |
| 2758-MYU Q9000 | 2.00 | 4GB | 17" WUXGA | 10.6" WXGA | Cam | 2x320GB | 1 | DVD±RW | Intel 5300 | None | /54 | Yes | Wacom | Bus64 No Oct 09 |

- **ds = dual screen**
- **17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks**
- **Select models include digitizer on palm rest**

| | | | | | | |
|---|--|--------------------------------|---------|--|--|--|
| Positioning Processor | Mobile workstation; three spindles Intel® Core™ 2 Quad processor Q9000 with quad-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache | | | Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 64 ♦ Vista Premium logo Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite® | | |
| Memory | 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; | | | | | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 320GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports third disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | |
| Displays | Primary: 17.0" (431.8mm) WUXGA (1920x1200) color, widescreen, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut; Secondary: 10.6" (268.7mm) WXGA (768x1280) color, portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size | | | | | |
| Color calibration Camera | huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus | | | | | |
| Discrete graphics | NVIDIA® Quadro® FX3700M, PCI Express® x16, 1GB memory; Max external resolution: 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort) | | | | | |
| Keyboard TrackPoint® | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys | | | | | |
| Touch pad | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | |
| Numeric keypad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label | | | | | |
| Digitizer | 10-key numeric keypad on right side of keyboard | | | | | |
| ThinkLight™ | Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side | | | | | |
| Dimensions ³ | 9-cell 17W" (WxDxH): 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm | | | | | |
| Weight ² | 9-cell: starting at 10.9 lb (4.96kg) | | | | | |
| Case color | Black | | | | | |
| Case material | Top: magnesium alloy; Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic | | | | | |
| Battery - type | Lithium Ion 9-cell | | | | | |
| Battery - life ¹⁰ | 9-cell: up to 2.1 hr | | | | | |
| Chipset | Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus | | | | | |
| ExpressCard/34 | One slot (ExpressCard/34) | | | | | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | | | | | |
| Compact Flash | None | | | | | |
| Smart Card read | None | | | | | |
| Multicard reader | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) | | | | | |
| Ports | Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin conn; 1394a-2000 standard) | | | | | |
| Mini PCI Express | Three Mini PCI Express slots | | | 170-watt AC adapter | | |
| Intel 5300 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 | | | ENERGY STAR® 5.0-compliant | | |
| 2G Turbo | None | | | RoHS-compliant | | |
| UWB | None (uses Half-Mini PCIe slot) | | | International Warranty Service ¹⁷ | | |
| Modem | 56K V.92 ⁶ modem in Communications Daughter Card socket | | | 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | ThinkPlus™.22 3-year LOR 9x5 NBD | | |
| Ethernet | Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | 41C9176 | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | ThinkPlus 4-year LOR 9x5 NBD | | |
| Audio support | High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | 41C9177 | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | ThinkPlus 5-year LOR 9x5 NBD | | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | | 41C9179 | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | ThinkPlus 4-year P&L P/U Depot | | |
| Limited warranty ¹² | 3-year - EasyServ™.19 depot repair service / service upgrades ²² available | | | 41C9178 | | |
| 1GB PC3-8500 DDR3 L-H SODIMM | 55Y3706 | ThinkPad Battery 37++ (9-cell) | 45J7914 | ThinkPlus 5-year P&L P/U Depot | | |
| 2GB PC3-8500 DDR3 L-H SODIMM | 55Y3707 | ThinkPad 170W AC Adapter | 41R4421 | 41C9180 | | |
| 4GB PC3-8500 DDR3 L-H SODIMM | 55Y3708 | ThinkPad W700 Mini Dock 2.0 | 57Y4345 | Post-warranty annual maintenance agreements at | | |
| Other accessories on O-W700 sheet | Other accessories at lenovo.com/accessories | | | lenovo.com/thinkplus/warranty | | |

See footnotes for important warranty information

Intel Centrino® 2 with vPro™ technology

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US model announced October 22, 2009; previous models on March 24, 2009

(NIC15-3) October 2009

US model withdrawn effective December 2009

Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann 03/17/09 |
| 4GB PC3-8500 DDR3 SODIMM | 51J0493 | ann 03/03/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann 06/23/09 |

Ultrabay Slim 9.5mm

| | | |
|---|---------|--------------|
| Serial ATA Hard Drive Bay Adapter III ⁴⁸ | 43N3412 | ann 06/23/09 |
| DVD-ROM Ultrabay Slim SATA 1.5Gb/s | 43N3212 | ann 08/05/08 |
| CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸ | 43N3213 | ann 08/05/08 |
| DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸ | 43N3214 | ann 08/05/08 |

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

| | | |
|---|---------|--------------|
| DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s | 43R9147 | ann 08/05/08 |
| DVD Burner Ultrabay Enh SATA 1.5Gb/s | 43R9149 | ann 08/05/08 |
| Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s | 43R9150 | ann 08/05/08 |
| Blu-ray Reader / DVD Burner Ultrabay Enh | 43N3295 | ann 01/07/10 |

Storage and removable storage

| | | |
|--|---------|--------------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

| | | |
|---|---------|--------------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) | 43N3417 | ann 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

ThinkPad Expansion

| | | |
|--|---------|--------------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann 07/28/09 |
| ThinkPad W700 Mini Dock 2.0 | 57Y4345 | ann 09/29/09 |

More information at www.lenovo.com/support/W700minidock

Keyboard

| | | |
|---|---------|--------------|
| TrackPoint Cap Collection | 73P2698 | ann 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

Mouse

| | | |
|--|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann 01/22/08 |

Security

| | | |
|---------------------------------------|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann 06/27/06 |

⁵⁷ Only compatible with the models having 54mm Express card slot.

Multimedia

| | | |
|----------------------------|---------|--------------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|----------------------------|---------|--------------|

Batteries

| | | |
|--------------------------------|---------|--------------|
| ThinkPad Battery 37++ (9-cell) | 45J7914 | ann 08/12/08 |
| ThinkPad 170W AC Adapter | 41R4421 | ann 08/12/08 |
| ThinkPad 230W AC Adapter | 55Y9333 | ann 02/23/10 |

More information at www.lenovo.com/alldaycomputing

Carrying Cases

Up to 17.0" widescreen models:

| | | |
|------------------------------------|---------|--------------|
| ThinkPad 17W Business Topload Case | 43R9117 | ann 08/12/08 |
|------------------------------------|---------|--------------|

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

Monitor Accessories⁴⁶

| | | |
|-----------------------------------|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann 09/22/09 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad W701



Lenovo ThinkPad W701 with
ThinkPad W700 Mini Dock 2.0
57Y4345



ThinkPad 170W AC Adapter
41R4421



ThinkPad Battery 37++ (9-cell)
45J7914



Lenovo ThinkPad W701



Lenovo ThinkPad W701

ThinkPad® W701 2500 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | Memory (MHz) | Widescreen display | Discrete graphics | Disk(s) SATA GB ⁸ rpm | RAID | SATA optical | PCIe Mini Card 802.11 | Card slot | Color calib/ Adapter Intel vPro Preload | Power (watt) | Avail date |
|------------|-----------|--------------|--------------------|-------------------|----------------------------------|------|--------------|--------------------------|-----------|---|--------------|------------|
| 2500-3AU | i7-720QM | 2GBx1 1066 | 17" WXGA+ | FX2800M | 1x320G 7200 | No | DVD±RW | Intel 6300 ²⁸ | Exp 54 | 170W vPro | Pro 64 | Mar 10 |
| 2500-3BU | i7-820QM | 2GBx2 1066 | 17" WUXGA | FX2800M | 1x320G 7200 | No | DVD±RW | Intel 6300 | Smart | 230W vPro | Pro 64 | Mar 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | Mobile workstation; three spindles Intel® Core™ i7 processor i7-720QM or i7-820QM with quad-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i7-720QM: 1.60GHz, 6MB cache; i7-820QM: 1.73GHz, 8MB cache</i> | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • Fingerprint Software • ThinkVantage Toolbox • Adobe® Reader® • Skype™ for Windows • Corel® WinDVD® (DVD±RW) | |
| Memory | 2GB or 4GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets | | | | | | | | | | ISV software certifications Supports ThinkVantage® technologies | |
| SATA DVD±RW Ultrabay Enhanced SATA disk(s) | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high One disk, 320GB⁹ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Widescreen display | <i>Some:</i> 17.0" (433.0mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, 45% color gamut <i>Some:</i> 17.0" (433.0mm) WUXGA (1920x1200) color , anti-glare, RGB LED backlight , 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Color calibration Camera | <i>Some:</i> huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Discrete graphics | NVIDIA® Quadro® FX2800M , PCI Express® x16, 1GB memory supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort or dual-link DVI-D) @60Hz; 2048x1536 (VGA) @85Hz | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard <i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Dimensions ³ Weight ² Case material | <i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm <i>9-cell:</i> starting at 8.97 lb (4.07kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 9-cell <i>9-cell:</i> up to 2.0 hr | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Chipset ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports | Mobile Intel QM57 Express Chipset One ExpressCard/34 <i>Some:</i> [/54] One ExpressCard/34 or ExpressCard/54 None <i>Some:</i> Smart Card Reader 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| PCIe Mini Card Intel 6300 ²⁸ Modem Bluetooth™ Ethernet Intel AMT Audio support | One PCI Express Half Mini Card slot 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Security Security chip Fingerprint reader | UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpctr | |
| Limited warranty ¹² | 3-year - depot repair service / service upgrades ²² available | | | | | | | | | | ThinkPlus™. 22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | |

See footnotes for important warranty information
 US models announced February 23, 2010

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 (NIC3-1) February 2010



Lenovo® ThinkPad W701ds



Lenovo ThinkPad W701ds



Lenovo ThinkPad W701ds



ThinkPad 17W Business Topload Case
43R9117



ThinkPad 230W AC Adapter
55Y9333

ThinkPad® W701ds 2500 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Processor | Memory (MHz) | Primary display | Secondary display | Camera | Discrete graphics | Disk(s) SATA GB ⁸ rpm | Color RAID | Power calib/ Adapter (watt) | Intel vPro | Preload | Avail date |
|---|--|--------------|-----------------|-------------------|--------|-------------------|----------------------------------|--|-----------------------------|------------|---------|------------|
| 2500-2XU | i7-820QM | 4GBx2 1333 | 17" WUXGA | 10.6" WXGA | | FX3800M | 128G SSD + 320G 5400 | None | Yes | 230W vPro | Pro 64 | Mar 10 |
| 2500-3CU | i7-820QM | 2GBx2 1066 | 17" WUXGA | 10.6" WXGA | 2.0M | FX3800M | 500G 7200 | None | Yes | 230W vPro | Pro 64 | Mar 10 |
| <ul style="list-style-type: none">• ds = dual screen• 17" widescreen ThinkPad workstation with two RAID-capable disks• Select models include integrated color calibration and digitizer on palm rest | | | | | | | | | | | | |
| Positioning Processor | Mobile workstation; three spindles Intel® Core™ i7 processor i7-820QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; 1.73GHz, 8MB cache | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 | | | | |
| Memory | 4GB or 8GB std / 16GB max ⁷ / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets | | | | | | | Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage Power Manager• ThinkVantage System Update• Fingerprint Software• ThinkVantage Toolbox• Adobe® Reader®• Skype™ for Windows• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW) | | | | |
| SATA DVD±RW Ultrabay Enhanced SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some:</i> One disk, 500GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ (APS) <i>Some:</i> Two disks, 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high and 320GB (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, APS <i>All:</i> removable, upgradable, supports three disks max, Shock Mounted Hard Drive | | | | | | | ISV software certifications Supports ThinkVantage® technologies | | | | |
| Displays | <i>Primary:</i> 17.0" (433.0mm) WUXGA (1920x1200) color , anti-glare, RGB LED backlight , 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut; <i>Secondary:</i> 10.6" (268.7mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: <ul style="list-style-type: none">• Security key lock• Security cable lock slot• External monitor ports<ul style="list-style-type: none">– Analog VGA DB-15– Dual-link DVI-D– DisplayPort• Four USB 2.0 ports• eSATA port• Gigabit ethernet port• Microphone in and headphone out• S/PDIF (RCA coaxial digital out)• Requires 170 or 230 watt AC adptr | | | | |
| Color calibration Camera | huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | 230-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | | |
| Discrete graphics | NVIDIA® Quadro® FX3800M , PCI Express® x16, 1GB memory, supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort or dual-link DVI-D) @60Hz; 2048x1536 (VGA) @85Hz | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™ | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm <i>9-cell:</i> starting at 11.43 lb (5.23kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 9-cell <i>9-cell:</i> up to 2.0 hr | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | | | | | | | | | | | | |
| Chipset ExpressCard/34 ExpressCard/54 Compact Flash Smart Card read Multicard reader Ports | Mobile Intel QM57 Express Chipset One ExpressCard/34 None [CF] One Type I slot None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | |
| PCIe Mini Card Intel 6300 ²⁸ Modem Bluetooth™ Ethernet Intel AMT Audio support | One PCI Express Half Mini Card slot 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | ThinkPlus™. 22 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | | | |
| Limited warranty ¹² | 3-year - depot repair service / service upgrades ²² available | | | | | | | | | | | |

See footnotes for important warranty information
 US models announced February 23, 2010

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 (NIC3D-1) April 2010

Memory

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|--|----------------------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 ann 06/23/09 |

Ultrabay Slim 9.5mm

| | |
|---|----------------------|
| Serial ATA Hard Drive Bay Adapter III ⁴⁸ | 43N3412 ann 06/23/09 |
| DVD-ROM Ultrabay Slim SATA 1.5Gb/s | 43N3212 ann 08/05/08 |
| CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸ | 43N3213 ann 08/05/08 |
| DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸ | 43N3214 ann 08/05/08 |

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

| | |
|---|----------------------|
| DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s | 43R9147 ann 08/05/08 |
| DVD Burner Ultrabay Enh SATA 1.5Gb/s | 43R9149 ann 08/05/08 |
| Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s | 43R9150 ann 08/05/08 |
| Blu-ray Reader / DVD Burner Ultrabay Enh | 43N3295 ann 01/07/10 |

Storage and removable storage

| | |
|--|----------------------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 ann 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 ann 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 ann 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 ann 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 ann 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 ann 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 ann 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

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|---|----------------------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 ann 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) | 43N3417 ann 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 ann 08/26/08 |

| | |
|---|----------------------|
| USB 2.0 Portable 320GB Hard Disk | 45K1689 ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 ann 01/05/10 |

ThinkPad Expansion

| | |
|--|----------------------|
| Lenovo® Essential Notebook Stand | 45J9292 ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 ann 07/28/09 |
| ThinkPad W700 Mini Dock 2.0 | 57Y4345 ann 09/29/09 |

More information at www.lenovo.com/support/W700minidock

Keyboard

| | |
|--|----------------------|
| TrackPoint Cap Collection | 73P2698 ann 12/16/03 |
| USB Numeric Keypad | 33L3225 ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 ann 09/15/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

| | |
|---------------------------------------|----------------------|
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 ann 03/24/09 |

Mouse

| | |
|--|----------------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 ann 01/22/08 |

Security

| | |
|---|----------------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 ann 02/21/06 |
| ExpressCard Gemplus Smart Card Reader ⁵⁷ | 41N3043 ann 06/27/06 |

⁵⁷ Only compatible with the models having 54mm Express card slot.

Multimedia

| | |
|----------------------------|----------------------|
| ThinkPad In-Ear Headphones | 57Y4488 ann 01/07/10 |
|----------------------------|----------------------|

Batteries

| | |
|--------------------------------|----------------------|
| ThinkPad Battery 37++ (9-cell) | 45J7914 ann 08/12/08 |
| ThinkPad 170W AC Adapter | 41R4421 ann 08/12/08 |
| ThinkPad 230W AC Adapter | 55Y9333 ann 02/23/10 |

More information at www.lenovo.com/alldaycomputing

Carrying Cases

Up to 17.0" widescreen models:

| | |
|------------------------------------|----------------------|
| ThinkPad 17W Business Topload Case | 43R9117 ann 08/12/08 |
|------------------------------------|----------------------|

Monitors

| | |
|-------------------------------------|----------------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 ann 09/17/08 |

Monitor Accessories⁴⁶

| | |
|-----------------------------------|----------------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 ann 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 ann 09/22/09 |
| Radial Arm | 19K4464 ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X100e



Lenovo ThinkPad X100e



Lenovo ThinkPad X100e



Lenovo ThinkPad X100e with 3-cell battery



Lenovo ThinkPad X100e



Lenovo ThinkPad X100e family

ThinkPad® X100e (3508) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Top color | Blue- tooth | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|-------------|------------------------|-------------------------------------|-----------------------------|---------------------------|--------------------|--------------|----------------|-----------|---------------|
| 3508-28U | MV-40 | 1.60 | 1GB | 11.6" HD | LED | 0.3M | HD 3200 | 160GB 5400 | 11b/g/n | WWAN upg | | black | | Home P 32 | Jan 10 |
| 3508-29U | MV-40 | 1.60 | 2GB | 11.6" HD | LED | 0.3M | HD 3200 | 250GB 5400 | 11b/g/n | WWAN upg | | black | | Pro 32 | Jan 10 |
| 3508-2AU | MV-40 | 1.60 | 2GB | 11.6" HD | LED | 0.3M | HD 3200 | 250GB 5400 | 11b/g/n | Gobi 2000 | AT&T ²³ | black | | Pro 32 | Jan 10 |
| 3508-9BU | L335 | 1.60 | 1GB | 11.6" HD | LED | 0.3M | HD 3200 | 160GB 5400 | 11b/g/n | WWAN upg | | black | | Home P 32 | Mar 10 |
| 3508-9CU | L335 | 1.60 | 2GB | 11.6" HD | LED | 0.3M | HD 3200 | 250GB 5400 | 11b/g/n | WWAN upg | | black | | Pro 32 | Mar 10 |
| 3508-9DU | L335 | 1.60 | 2GB | 11.6" HD | LED | 0.3M | HD 3200 | 250GB 5400 | 11b/g/n | WWAN upg | | red | | Pro 32 | Mar 10 |
| 3508-9EU | L335 | 1.60 | 2GB | 11.6" HD | LED | 0.3M | HD 3200 | 250GB 5400 | 11b/g/n | Gobi 2000 | | black | Blue | Pro 32 | Mar 10 |
| 3508-9TU | L335 | 1.60 | 1GB | 11.6" HD | LED | 0.3M | HD 3200 | 160GB 5400 | 11b/g/n | Gobi 2000 | AT&T | black | | Home P 32 | Apr 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | |
|--|--|---|
| Positioning Processor | Entry ultraportable for excellent usability and reliability; one spindle AMD® Athlon™ Neo Processor for Ultrathin Notebooks MV-40 with single-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache or AMD Athlon Neo X2 Processor for Ultrathin Notebooks L335 with dual-core , virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache | Preloaded operating system ²⁰ - Some: Genuine Windows 7 Home Premium 32 - Some: Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft Research AutoCollage Touch |
| Memory | 1GB or 2GB std / 4GB max ⁷ / PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW SATA disk | None (use optional USB-based optical drive) 160GB ⁸ (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 9.5mm high, Active Protection System™, upgradable | |
| Widescreen display | 11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight , 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | Camera on top of screen, 0.3-megapixel, fixed focus, low light sensitive | |
| Integrated graphics | ATI™ Radeon™ HD 3200 graphics , in M780G, external analog monitor support via VGA DB-15 connector; <i>Maximum external resolution:</i> 2048x1536@60Hz | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | Full-size, 6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass Two-button touch pad, supports multi-touch function None | |
| Dimensions ³ Weight ² Case | <i>6-cell:</i> 11.1" x 8.2" x 0.6-1.2"; 282mm x 209mm x 16-30mm <i>6-cell:</i> from 3.3 lb (1.5kg) <i>Color:</i> black or red; <i>Material:</i> PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic | Supports ThinkVantage® technologies |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell <i>6-cell:</i> up to 5 hr | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Chipset | AMD M780G Chipset, SB710 south bridge | |
| Multicard reader ExpressCard/54 Ports | 4-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital) None Three USB 2.0 (one powered), external monitor (VGA DB-15), ethernet (RJ-45) | |
| PCIe Mini Card 11b/g/n WWAN upg Gobi™ 2000 | Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | ThinkPlus™, ²² 1-year LOR ²⁴ 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 |
| Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> AT&T®, contract required with service provider None <i>Some:</i> Bluetooth 2.1 wireless Realtek RT8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20582-11Z codec / stereo speakers, 1.5 watt x 2 / combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole None None | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information

® US models announced March 30 or April 6, 2010; previous models on January 5, 2010

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(MNK1-2) April 2010

ThinkPad® X100e (3508) - TopSeller (XP Home)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Camera | Integrated graphics | Disk SATA GB ⁵ rpm | SATA optical | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Bat- tery Carrier cells | Whorse (W) Gbl (G) Educ | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|--------|------------------------|-------------------------------------|-----------------|-----------------------------|---------------------------|-------------------------------|-------------------------------|---------------|
| 3508-24U | MV-40 | 1.60 | 1GB | 11.6" HD | LED | 0.3M | HD 2200 | 160G 5400 | None | 11b/g/n | Gobi 2000 | None 6 | XP Home | No Jan 10 |

- This small and medium business (SMB) model is part of the US TopSeller™ Program

| | | | | | | |
|--|--|---|---------|--|--|--|
| Positioning Processor | Entry ultraportable for excellent usability and reliability; one spindle AMD® Athlon™ Neo Processor for Ultrathin Notebooks MV-40 with single-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache | | | Preloaded operating system ²⁰ - Genuine Windows® XP Home Edition | | |
| Memory | 1GB std / 4GB max ⁷ / PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Presentation Director• Lenovo System Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Windows Live™ Toolbar• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day) | | |
| SATA DVD±RW SATA disk | None (use optional USB-based optical drive) 160GB ⁸ (5400 rpm) / SATA 3.0Gb/s, 9.5mm high, Active Protection System™, upgradable | | | | | |
| Widescreen display Camera | 11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight , 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus, low light sensitive | | | | | |
| Integrated graphics | ATI™ Radeon™ HD 2200 graphics , in M780G, external analog monitor support via VGA DB-15 connector; <i>Maximum external resolution:</i> 2048x1536@60Hz | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | Full-size, 6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass Two-button touch pad, supports multi-touch function None | | | | | |
| Dimensions ³ Weight ² Case | <i>6-cell:</i> 11.1" x 8.2" x 0.6-1.2"; 282mm x 209mm x 16-30mm <i>6-cell:</i> from 3.3 lb (1.5kg) <i>Color:</i> black; <i>Material:</i> PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell <i>6-cell:</i> up to 5 hr | | | | | |
| Chipset | AMD M780G Chipset, SB710 south bridge | | | Supports ThinkVantage® technologies | | |
| Multicard reader ExpressCard/54 Ports | 4-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital) None Three USB 2.0 (one powered), external monitor (VGA DB-15), ethernet (RJ-45) | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | |
| PCIe Mini Card 11b/g/n Gobi™ 2000 | Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x2 Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 41C9166 | | |
| Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | None None Bluetooth 2.1 wireless Realtek RT8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20582-11Z codec / stereo speakers, 1.5 watt x 2 / combo audio/mic jack | | | ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole None None | | | ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | |
| 1GB PC2-5300 DDR2 SODIMM | 40Y7734 | ThinkPad Battery 17 (3-cell) | 57Y4558 | | | |
| 2GB PC2-5300 DDR2 SODIMM | 40Y7735 | ThinkPad Battery 17+ (6-cell) | 57Y4559 | | | |
| Other accessories on O-X100-E sheet | | Other accessories at lenovo.com/accessories | | | | |

See footnotes for important warranty information
US model announced January 12, 2010

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(MNK1-4) January 2010

Memory

| | | | |
|------------------------------------|---------|-----|----------|
| 1GB PC2-5300 DDR2 SODIMM | 40Y7734 | ann | 01/05/06 |
| 1GB PC2-5300 DDR2 SODIMM (25-Pack) | 51J0502 | ann | 03/17/09 |
| 2GB PC2-5300 DDR2 SODIMM | 40Y7735 | ann | 11/28/06 |
| 2GB PC2-5300 DDR2 SODIMM (25-Pack) | 51J0548 | ann | 03/17/09 |

Storage and removable storage

| | | | |
|---|---------|-----|----------|
| 500GB Disk SATA 1.5Gb/s (5400 rpm) | 43N3420 | ann | 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | | |
|--|---------|-----|----------|
| ThinkPad AT&T® Gobi 2000 Broadband Opt | 78Y1398 | ann | 01/07/10 |
| ThinkPad Gobi 2000 Broadband Option | 78Y1399 | ann | 01/07/10 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultraslim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Preferred Pro USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|---|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann | 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann | 11/25/08 |

Security

| | | | |
|-------------------------------------|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Modem

| | | | |
|----------------------|---------|-----|----------|
| USB 2.0 Lenovo Modem | 43R1814 | ann | 02/26/08 |
|----------------------|---------|-----|----------|

Batteries

| | | | |
|--|---------|-----|----------|
| ThinkPad Battery 17 (3-cell) | 57Y4558 | ann | 01/05/10 |
| ThinkPad Battery 17+ (6-cell) | 57Y4559 | ann | 01/05/10 |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |
| ⁴⁴ Requires the <i>ThinkPad 90W AC Adapter</i> 40Y7659 or the adapter provided with the system. | | | |

More information at www.lenovo.com/alldaycomputing

| | | | |
|-----------------------------------|---------|-----|----------|
| ThinkPad 65W AC Adapter | 40Y7696 | | |
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultraslim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493

| | | | |
|--------------------------------------|---------|-----|----------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com**Carrying Cases**

| | | | |
|-----------------------|---------|-----|----------|
| ThinkPad X100e Sleeve | 57Y4286 | ann | 01/05/10 |
| ThinkPad X100e Sling | 57Y4287 | ann | 01/05/10 |

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |

Monitor Accessories⁴⁶

| | | | |
|-----------------------------------|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories

For more information on accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X200



Lenovo ThinkPad X200 with
X200/X200s (WXGA), X201 12W Privacy Filter
55Y9264



Lenovo ThinkPad X200



Lenovo ThinkPad X200 with
ThinkPad X200 UltraBase
43R8781



Lenovo ThinkPad X200



ThinkPad 65W AC Adapter
40Y7696

ThinkPad® X200 (7454) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Camera | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Intel AMT | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|--------|-------------------------------------|----------------------------|-------------------------------|---------------------------------|-------------------|------------------------------|--------------|---------|---------------|
| 7454-32U | P8700 | 2.53 | 2GB | 12.1" WXGA | LED | | 160GB 5400 | | | ❖ Intel 5100 ²⁸ | WWAN upg | None | | XP Pro | Oct 09 |
| 7454-34U | P8700 | 2.53 | 2GB | 12.1" WXGA | LED | Cam | 160GB 7200 | DVD±RW | UltraBase | ❖ Intel 5100 | WWAN upg | None | | XP Pro | Oct 09 |
| 7454-3SU | P8800 | 2.66 | 4GB | 12.1" WXGA | LED | Cam | 160GB 7200 | DVD±RW | UltraBase | ❖ Intel 5100 | WWAN upg | None | Yes | XP Pro | Oct 09 |
| 7454-GKU | P8600 | 2.40 | 2GB | 12.1" WXGA | LED | | 250GB 5400 | | | ❖ Intel 5100 | WWAN upg | None | Yes | XP Pro | Dec 09 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8600, P8700, or P8800 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | | | | |
| Memory | 2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update | | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB⁸ (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, Active Protection System™, removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std X200 UltraBase | | | | | | | | | | Supports ThinkVantage® technologies | | | | |
| Widescreen display Camera | 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 | | | | |
| Graphics controller Graphics - external | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz | | | | | | | | | | Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | | |
| Dimensions ³ | <i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.98 lb (1.35kg); <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg) | | | | | | | | | | | | | | |
| Weight ² Case color Case material Battery - type Battery - life ¹⁰ | Black Magnesium alloy Lithium Ion 6-cell <i>4-cell:</i> up to 3.3 hr; <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr | | | | | | | | | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) | | | | | | | | | | | | | | |
| Media slice Multicard reader ExpressCard/54 Ports | <i>Some:</i> X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | | | | | | | | | | | | |
| Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator <i>Non-vPro model:</i> Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 <i>vPro model:</i> Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | |
| Intel AMT Audio support | High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | |

See footnotes for important warranty information
US model announced December 15, 2009;
previous models on October 22, 2009

❖ Intel Centrino® 2 processor technology
❖ Intel Centrino 2 with vPro™ technology

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(MOC2-1) December 2009

ThinkPad® X200 (7454) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Cam- era | Disk SATA GB ⁹ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe Bat- tery or Turbo | Whorse (W) Pre- Gbl (G) Educ | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|-------------|-------------------------------------|----------------------------|-------------------------------|---------------------------------|-----------------------|------------------------------------|------------------------------------|---------------|
| 7454-33U | P8700 | 2.53 | 2GB | 12.1" WXGA | LED | | 160GB 5400 | | | Intel 5100 ²⁸ | WWAN upg | None | 6 Pro 32 | No Oct 09 |
| 7454-3VU | P8700 | 2.53 | 2GB | 12.1" WXGA | LED | Cam | 160GB 7200 | DVD±RW | UltraBase | Intel 5100 | Verizon ¹⁶ | None | 6 Pro 32 | No Nov 09 |
| 7454-3WU | P8700 | 2.53 | 2GB | 12.1" WXGA | LED | Cam | 160GB 7200 | DVD±RW | UltraBase | WiMAX | WWAN upg | None | 6 Pro 32 | No Nov 09 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 | | | |
| Memory | 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo Online Data Backup | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, Active Protection System™, removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std <i>X200 UltraBase</i> | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Widescreen display Camera | 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | | | |
| Graphics controller Graphics - external | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz | | | | | | | | | | ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB FDE 7200 rpm 43N3411 | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g | | | |
| Dimensions ³ | <i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.98 lb (1.35kg); <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy | | | | | | | | | | | | | |
| Weight ² Case | <i>Color:</i> black; <i>Material:</i> magnesium alloy | | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell <i>4-cell:</i> up to 3.3 hr; <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) | | | | | | | | | | | | | |
| Media slice Multicard reader ExpressCard/54 Ports | <i>Some:</i> X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | | | | | | | | | | | |
| Mini PCI Express Intel 5100 ²⁸ WiMAX | Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak) | | | | | | | | | | | | | |
| WWAN upg Verizon ¹⁶ | <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adpdr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with <u>Verizon</u> | | | | | | | | | | | | | |
| 2G Turbo UWB | None | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | |
| Ethernet | Intel 82567LF Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available | | | | | | | | | | | | | |

See footnotes for important warranty information
 ⚡ US models announced November 3, 2009; previous model on October 22, 2009

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ThinkPad®



Lenovo® ThinkPad X200s



Lenovo ThinkPad X200s



Lenovo ThinkPad X200s



ThinkPad 12W Case Sleeve
51J0476



Lenovo ThinkPad X200s



ThinkPad Battery 47++ (9-cell)
43R9255

ThinkPad® X200s (7466) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Widescreen display | Disk SATA GB ⁶ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Bat- tery Blue/ Fing cells | Workhorse (W) Pre-Global (G)Avail load date |
|--|--|------|---------|--------------------------------|-------------------------------------|----------------------------|-------------------------------|---------------------------------|-------------------|------------------------------|---|---|
| 7466-43U | SL9600 | 2.13 | 2GB | 12.1" WXGA | 160GB 7200 | DVD±RW | UltraBase | ❖Intel 5100 ²⁸ | WWAN upg | None | Yes | 6 XP Pro No Oct 09 |
| <ul style="list-style-type: none">• Compared to the X200, the X200s has lighter weight, low voltage processors, LED backlight displays, and roll cage in display cover• This small and medium business (SMB) model is part of the US TopSeller™ Program• This model has a 3-years limited warranty | | | | | | | | | | | | |
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache | | | | | | | | | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | |
| Memory | 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | | | | | | | | | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase | | | | | | | | | | | |
| Widescreen display Camera | 12.1" (308mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus | | | | | | | | | | | |
| Graphics controller Graphics - external | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ | without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg) | | | | | | | | | | | |
| Weight ² | | | | | | | | | | | | |
| Case color | black | | | | | | | | | | | |
| Case material | Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell | | | | | | | | | | | |
| Battery - life ¹⁰ | 4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr | | | | | | | | | | | |
| Chipset | Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) | | | | | | | | | | | |
| Media slice Multicard Reader ExpressCard/54 Ports | X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | | | | | | | | | |
| Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None | | | | | | | | | | | |
| Modem Bluetooth™ Ethernet Intel AMT | 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available | | | | | | | | | | | |
| 1GB PC3-8500 DDR3 L-H SODIMM | | | 55Y3706 | ThinkPad Battery 47 (4-cell) | | | | 43R9253 | | | | |
| 2GB PC3-8500 DDR3 L-H SODIMM | | | 55Y3707 | ThinkPad Battery 47+ (6-cell) | | | | 43R9254 | | | | |
| ThinkPad X200 UltraBase | | | 43R8781 | ThinkPad Battery 47++ (9-cell) | | | | 43R9255 | | | | |
| Other accessories on O-X200 sheet | Other accessories at lenovo.com/accessories | | | | | | | | | | | |

See footnotes for important warranty information
US model announced October 22, 2009

✦ Intel Centrino® 2 with vPro™ technology

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(PEC2-1) October 2009

ThinkPad® X200s (7466) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Widescreen display | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Blue/ Fing cells | Bat- tery | Pre-Global load | Workhorse (W) Global (G) Avail date |
|--|--|------|--------|-----------------------|---|--------------------------------|-------------------------------|---------------------------------|-------------------|------------------------------|---|--------------|--------------------|---|
| 7466-44U | SL9600 | 2.13 | 4GB | 12.1" WXGA+ | 320GB 7200 | DVD±RW | UltraBase | ❖ Intel 5100 ²⁸ | None | None | Yes | 9 | Pro 64 | No Oct 09 |
| <ul style="list-style-type: none">• Compared to the X200, the X200s has lighter weight, low voltage processors, LED backlight displays, and roll cage in display cover• This small and medium business (SMB) model is part of the US TopSeller™ Program• This model has a 3-years limited warranty | | | | | | | | | | | | | | |
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache | | | | | | | | | | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 | | | |
| Memory | 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • Lenovo Online Data Backup • Norton™ Internet Security 2009 | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 320GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Widescreen display Camera | 12.1" (308mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio None | | | | | | | | | | ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 | | | |
| Graphics controller Graphics - external | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz | | | | | | | | | | Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | |
| Dimensions ³ | without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg) | | | | | | | | | | | | | |
| Weight ² Case color Case material | black Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy | | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 9-cell 4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) | | | | | | | | | | | | | |
| Media slice Multicard Reader ExpressCard/54 Ports | X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | | | | | | | | | | | |
| Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None | | | | | | | | | | | | | |
| Modem Bluetooth™ Ethernet Intel AMT Audio support | 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available | | | | | | | | | | | | | |
| 1GB PC3-8500 DDR3 L-H SODIMM | | | | | 55Y3706 | ThinkPad Battery 47 (4-cell) | | | | 43R9253 | | | | |
| 2GB PC3-8500 DDR3 L-H SODIMM | | | | | 55Y3707 | ThinkPad Battery 47+ (6-cell) | | | | 43R9254 | | | | |
| ThinkPad X200 UltraBase | | | | | 43R8781 | ThinkPad Battery 47++ (9-cell) | | | | 43R9255 | | | | |
| Other accessories on O-X200 sheet | | | | | Other accessories at lenovo.com/accessories | | | | | | | | | |

See footnotes for important warranty information
US model announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(PEC2-2) October 2009

Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann 03/17/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann 06/23/09 |

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

| | | |
|--|---------|--------------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in X200 UltraBase (43R8781)

| | | |
|---|---------|--------------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) | 43N3417 | ann 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | |
|--|---------|--------------|
| Verizon® WWAN UNDP Broadband Mini PCIe | 43R9151 | ann 08/05/08 |
| AT&T® WWAN HSPA Broadband Mini PCIe | 43R9152 | ann 08/26/08 |

ThinkPad Expansion

| | | |
|--|---------|--------------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann 07/28/09 |
| ThinkPad X200 UltraBase | 43R8781 | ann 08/05/08 |

Keyboard

| | | |
|--|---------|--------------|
| TrackPoint Cap Collection | 73P2698 | ann 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

| | | |
|---------------------------------------|---------|--------------|
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

Mouse

| | | |
|--|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann 01/22/08 |

Security

| | | |
|--|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| X200s (WXGA+), X201s 12W Privacy Filter | 43R2470 | ann 08/05/08 |
| X200/X200s (WXGA), X201 12W Privacy Filter | 55Y9264 | ann 04/07/09 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann 06/27/06 |

Multimedia

| | | |
|----------------------------|---------|--------------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|----------------------------|---------|--------------|

Batteries

| | | |
|-----------------------------------|---------|--------------|
| ThinkPad Battery 47 (4-cell) | 43R9253 | ann 08/05/08 |
| ThinkPad Battery 47+ (6-cell) | 43R9254 | ann 08/05/08 |
| ThinkPad Battery 47++ (9-cell) | 43R9255 | ann 08/05/08 |
| ThinkPad External Battery Charger | 40Y7625 | ann 09/20/05 |

More information at www.lenovo.com/alldaycomputing

| | | |
|----------------------------------|---------|--------------|
| ThinkPad 65W AC Adapter | 40Y7696 | ann 01/05/06 |
| ThinkPad 90W AC Adapter | 40Y7659 | ann 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | |
|--------------------------------------|---------|--------------|
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann 01/06/09 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 12" widescreen models:

| | | |
|--------------------------|---------|--------------|
| ThinkPad 12W Case Sleeve | 51J0476 | ann 08/18/09 |
|--------------------------|---------|--------------|

Up to 13.3" widescreen models:

| | | |
|-----------------------------|---------|--------------|
| ThinkPad Ultraportable Case | 41U5062 | ann 05/13/08 |
|-----------------------------|---------|--------------|

Up to 15.4" widescreen models:

| | | |
|---|---------|--------------|
| Lenovo Business Messenger Case | 51J0475 | ann 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann 05/13/08 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

Monitor Accessories⁴⁶

| | | |
|---|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable ⁵⁰ | 57Y4393 | ann 08/04/09 |
| DisplayPort to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

| | | |
|----------------------------------|---------|--------------|
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann 09/22/09 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115



Lenovo ThinkPad X200 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115

Personal Systems Reference (PSREF)

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*

See footnotes for important warranty information
US models announced October 22, 2009

ThinkPad® X200 Tablet (7449) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Widescreen display | Cam | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Bat- tery cells | Preload | Avail date |
|--|--|------|---|-----------------------|--------------------|-------------------------------------|----------------------------|-------------------------------|---------------------------------|-------------------|--|-----------------------|---------|---------------|
| 7449-44U | SL9600 | 2.13 | 2GB | 12.1" WXGA | Entry | 160G 5400 | Optional | Optional | ❖ Intel 5100 ²⁸ | WWAN upg | None | 4 | Pro 32 | Oct 09 |
| 7449-4KU | SL9600 | 2.13 | 2GB | 12.1" WXGA | MultiTouch | Cam 160G 7200 | Optional | Optional | ❖ Intel 5100 | WWAN upg | None | 8 | Pro 32 | Oct 09 |
| • These small and medium business (SMB) models are part of the US TopSeller™ Program | | | | | | | | | | | | | | |
| Processor | Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache | | | | | | | | | | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 | | | |
| Memory | 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | None Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase | | | | | | | | | | • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) | | | |
| Widescreen display | Entry: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen MultiTouch: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) All: WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Camera | Some: camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm) | | | | | | | | | | ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g | | | |
| Graphics controller | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 | | | | | | | | | | 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | |
| Graphics - external | External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @ 75Hz (VGA) | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None | | | | | | | | | | | | | |
| Dimensions ³ | without X200 UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm without X200 UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm 4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg) Color: black; Material: magnesium alloy | | | | | | | | | | | | | |
| Weight ² Case Battery - type Battery - life ¹⁰ | Lithium Ion 4-cell or 8-cell 4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) | | | | | | | | | | | | | |
| Media slice Multicard Reader ExpressCard/54 Ports | Optional: X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | | | | | | | | | | | |
| Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available | | | | | | | | | | | | | |
| 1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-X200-T sheet | 55Y3706 55Y3707 | | ThinkPad Battery 12 (4-cell) ThinkPad Battery 12++ (8-cell) Other accessories at lenovo.com/accessories | | 43R9256 43R9257 | | | | | | | | | |

See footnotes for important warranty information
US models announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann | 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann | 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann | 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann | 03/17/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

| | | | |
|--|---------|-----|----------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann | 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann | 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann | 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann | 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann | 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann | 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann | 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann | 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in X200 UltraBase (43R8781)

| | | | |
|---|---------|-----|----------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann | 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) | 43N3417 | ann | 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)

| | | | |
|--|---------|-----|----------|
| Verizon® WWAN UNDP Broadband Mini PCle | 43R9151 | ann | 08/05/08 |
| AT&T® WWAN HSPA Broadband Mini PCle | 43R9152 | ann | 08/26/08 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |
| ThinkPad X200 UltraBase | 43R8781 | ann | 08/05/08 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultrabay Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|--|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |

Security

| | | | |
|---------------------------------------|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann | 06/27/06 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Tablet

| | | | |
|---------------------------------|---------|-----|----------|
| ThinkPad Digitizer Pen | 41U3143 | ann | 11/14/06 |
| ThinkPad Tablet Tether (3-pack) | 41U4820 | ann | 11/14/06 |

Batteries

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 12 (4-cell) | 43R9256 | ann | 09/23/08 |
| ThinkPad Battery 12++ (8-cell) | 43R9257 | ann | 09/23/08 |
| ThinkPad External Battery Charger ⁴⁷ | 40Y7625 | ann | 09/20/05 |

⁴⁷ Only supports ThinkPad Battery 12 (4-cell) 43R9256

More information at www.lenovo.com/alldaycomputing

| | | | |
|----------------------------------|---------|-----|----------|
| ThinkPad 65W AC Adapter | 40Y7696 | ann | 01/05/06 |
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultrabay AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultrabay AC/DC Combo Adapter 41R4493

| | | | |
|--------------------------------------|---------|-----|----------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com

Carrying Cases

X200 Tablet:

| | | | |
|-----------------------------|---------|-----|----------|
| ThinkPad X200 Tablet Sleeve | 43R9115 | ann | 09/23/08 |
|-----------------------------|---------|-----|----------|

Up to 13.3" widescreen models:

| | | | |
|-----------------------------|---------|-----|----------|
| ThinkPad Ultraportable Case | 41U5062 | ann | 05/13/08 |
|-----------------------------|---------|-----|----------|

Up to 15.4" widescreen models:

| | | | |
|---|---------|-----|----------|
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|---|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable ⁵⁰ | 57Y4393 | ann | 08/04/09 |
| DisplayPort to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann | 08/05/08 |

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

| | | | |
|----------------------------------|---------|-----|----------|
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X201
(TrackPoint model)



Lenovo ThinkPad X201 with
ThinkPad Battery 47++ (9-cell)
43R9255



Lenovo ThinkPad X201
(UltraNav model)



Lenovo ThinkPad X201
(UltraNav model)



ThinkPad X200 UltraBase
43R8781



ThinkPad 65W AC Adapter
40Y7696

ThinkPad® X201 (3249) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | Max Base turbo (GHz)(GHz) | Memory | Wide- screen display | Camera | Disk SATA GB ^a rpm | Optical in UltraBase | ThinkPad X200 UltraBase | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Intel vPro | Preload | Avail date |
|------------|----------------|---------------------------------|--------|----------------------------|--------|-------------------------------------|----------------------------|-------------------------------|-----------------------------|---------------------------|--------------------|---------------|---------|---------------|
| 3249-2RU | i5-540M | 2.53 3.06 | 2GB | 12.1" WXGA | 2.0M | 250G 5400 | DVD±RW | UltraBase | Intel 6200 ²⁸ | WWAN upg | | vPro | XP Pro | Mar 10 |
| 3249-2PU | i5-540M | 2.53 3.06 | 4GB | 12.1" WXGA | 2.0M | 320G 7200 | DVD±RW | UltraBase | Intel 6200 | Gobi 2000 | AT&T ²³ | vPro | XP Pro | Mar 10 |
| 3249-2SU | i5-540M | 2.53 3.06 | 2GB | 12.1" WXGA | | 250G 5400 | | | Intel 6200 | WWAN upg | | vPro | XP Pro | Mar 10 |
| 3249-38U | i5-520M | 2.40 2.93 | 2GB | 12.1" WXGA | | 250G 5400 | | | Intel 6200 | WWAN upg | | vPro | XP Pro | Apr 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | | | | | | | | | | Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 | | | |
| Memory | 2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 250GB⁸ (5400 rpm) or 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Widescreen display Camera | 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 | | | |
| Integrated graphics | Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz | | | | | | | | | | Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | |
| Dimensions ³ | <i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg) | | | | | | | | | | | | | |
| Weight ² Case Battery - type Battery - life ¹⁰ | <i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 6-cell <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | | | | | | | | | | | | |
| Media slice Multicard reader ExpressCard/54 Ports | <i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card Intel 6200 ²⁸ WWAN upg Gobi™ 2000 | Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | | | | | | | | | | | |
| Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> AT&T®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | | | |

See footnotes for important warranty information

US model announced April 6, 2010; previous models on March 2, 2010

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(MOC3-7) April 2010

ThinkPad® X201 (3249) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | Max Base turbo (GHz) (GHz) | Memory | Wide- screen display | Camera | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Intel vPro | Preload | Avail date |
|------------|----------------|----------------------------------|--------|----------------------------|------------|-------------------------------------|----------------------------|-------------------------------|-----------------------------|---------------------------|-----------------------|---------------|---------|---------------|
| 3249-2EU | i5-540M | 2.53 | 3.06 | 2GB | 12.1" WXGA | 250G 5400 | | | Intel 6200 ²⁸ | WWAN upg | | vPro | Pro 32 | Mar 10 |
| 3249-2FU | i5-540M | 2.53 | 3.06 | 2GB | 12.1" WXGA | 320G 7200 | DVD±RW | UltraBase | Intel 6200 | WWAN upg | | vPro | Pro 32 | Mar 10 |
| 3249-2GU | i5-540M | 2.53 | 3.06 | 4GB | 12.1" WXGA | 2.0M 320G 7200 | DVD±RW | UltraBase | Intel 6200 | Gobi 2000 | Verizon ¹⁶ | vPro | Pro 32 | Mar 10 |
| 3249-2HU | i5-520M | 2.40 | 2.93 | 4GB | 12.1" WXGA | 2.0M 320G 7200 | DVD±RW | UltraBase | Intel 6200 | WWAN upg | | vPro | Pro 32 | Mar 10 |
| 3249-2TU | i5-540M | 2.53 | 3.06 | 4GB | 12.1" WXGA | 2.0M 320G 7200 | DVD±RW | UltraBase | WiMAX | WWAN upg | | vPro | Pro 64 | Mar 10 |
| 3249-2UU | i5-540M | 2.53 | 3.06 | 4GB | 12.1" WXGA | 2.0M 320G 7200 | DVD±RW | UltraBase | Intel 6200 | Gobi 2000 | AT&T ²³ | vPro | Pro 64 | Mar 10 |
| 3249-2VU | i5-540M | 2.53 | 3.06 | 4GB | 12.1" WXGA | 2.0M 320G 7200 | DVD±RW | UltraBase | Intel 6200 | WWAN upg | | vPro | Pro 64 | Mar 10 |
| 3249-C2U | i5-520M | 2.40 | 2.93 | 2GB | 12.1" WXGA | 2.0M 160G 7200 | | | Intel 6200 | WWAN upg | | vPro | Pro 64 | Apr 10 |
| 3249-C3U | i5-520M | 2.40 | 2.93 | 2GB | 12.1" WXGA | 2.0M 320G 7200 | | | Intel 6200 | WWAN upg | | vPro | Pro 64 | Apr 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache | | | | | | | | | | Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 | | | |
| Memory | 2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software | | | |
| SATA DVD±RW Ultrabay Slim SATA disk | Some: DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB⁸ (7200 rpm), 250GB (5400 rpm), or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase | | | | | | | | | | | | | |
| Widescreen display | 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio | | | | | | | | | | | | | |
| Camera | Some: camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Integrated graphics | Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz | | | | | | | | | | ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 | | | |
| Keyboard | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | |
| Touchpad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ | <i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg) | | | | | | | | | | | | | |
| Weight ² | <i>Color:</i> black; <i>Material:</i> magnesium alloy | | | | | | | | | | | | | |
| Case | Lithium Ion 6-cell | | | | | | | | | | | | | |
| Battery - type | <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr | | | | | | | | | | | | | |
| Battery - life ¹⁰ | | | | | | | | | | | | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | | | | | | | | | | | | |
| Media slice | Some: ThinkPad X200 UltraBase media slice (see right side) | | | | | | | | | | | | | |
| Multicard reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | | | | | | | | | | | | | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | | | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | |
| Intel 6200 ²⁸ | Some: 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 | | | | | | | | | | | | | |
| WiMAX | Some: 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX | | | | | | | | | | | | | |
| WWAN upg | Some: Wireless WAN upgradable | | | | | | | | | | | | | |
| Gobi™ 2000 | Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | | | | | | | | | | | |
| Carrier | Some: AT&T® or Verizon®, contract required with service provider | | | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | | | |
| Ethernet | Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | |
| Fingerprint reader | UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | |

See footnotes for important warranty information

US models announced April 20, 2010; previous models on February 23 or March 2, 2010

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(MOC3-1) April 2010

ThinkPad® X201i (3249) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | Camera | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Intel vPro | Preload | Avail date |
|------------|-----------|------|--------|---------------------|--------|-------------------------------|----------------------|-------------------------|-----------------------|---------------------|------------|---------|------------|
| 3249-J2U | i3-330M | 2.13 | 2GB | 12.1" WXGA | None | 250G 5400 | Optional | Optional | Intel 1000 | WWAN upg | No | Pro 32 | Mar 10 |
| 3249-MCU | i3-330M | 2.13 | 2GB | 12.1" WXGA | None | 160G 7200 | Optional | Optional | Intel 1000 | WWAN upg | No | Pro 64 | Apr 10 |

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*

| | | |
|-------------------------------------|--|---|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i3 processor i3-330M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | |
| SATA DVD±RW Ultrabay Slim SATA disk | Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB ⁸ (7200 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i> | |
| Widescreen display | 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio | |
| Camera | None | |
| Integrated graphics | Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA) @75Hz | |
| Keyboard | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | |
| Touchpad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | <i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg) | |
| Weight ² | <i>Color:</i> black; <i>Material:</i> magnesium alloy | |
| Case | Lithium Ion 6-cell | |
| Battery - type | <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr | |
| Battery - life ¹⁰ | | |
| Chipset | Mobile Intel QM57 Express Chipset | |
| Media slice | <i>Option: ThinkPad X200 UltraBase media slice</i> (see right side) | |
| Multicard reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| Intel 1000 | 11b/g/n wireless ⁴ , PCIe Mini Card, Intel Centrino® Wireless-N 1000, 1x2 | |
| WWAN upg | Wireless WAN upgradable | |
| Modem | 56K V.92 ⁶ modem | |
| Bluetooth™ | None | |
| Ethernet | Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 | |
| Intel AMT | None | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | None | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | |

See footnotes for important warranty information

® US model announced April 20, 2010; previous model on February 23, 2010

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(MOC3i-1) April 2010

ThinkPad®



Lenovo® ThinkPad X201s
(TrackPoint model)



Lenovo ThinkPad X201s



Lenovo ThinkPad X201s
(UltraNav model)



Lenovo ThinkPad X201s
(TrackPoint model)



Lenovo ThinkPad X201s
(UltraNav model)



ThinkPad Battery 47++ (9-cell)
43R9255

ThinkPad® X201s (5143) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Widescreen display | Disk SATA GB ⁶ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Blue/ Finger | Bat-tery cells | Intel vPro | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|--------------------|-------------------------------|----------------------|-------------------------|--------------------------|---------------------|--------------|----------------|------------|---------|------------|
| 5143-28U | i7-640LM | 2.13 | 2.93 | 4GB | 12.1" WXGA+ | 320G 7200 | Optional | Optional | Intel 6200 ²⁸ | None | Yes | 6 | vPro | Pro 32 | Mar 10 |

- Compared to the X201, the X201s has lighter weight, low voltage processors, and roll cage in display cover
- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has a depot repair service 3-year limited warranty

| | | | | |
|--|--|--|---|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i7 processor i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 | |
| Memory | 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager | |
| SATA DVD±RW Ultrabay Slim SATA disk | Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i> | | Supports ThinkVantage® technologies | |
| Widescreen display Camera | 12.1" (308mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio None | | ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 | |
| Integrated graphics | Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz</i> | | Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | |
| Dimensions ³ | <i>without UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 20.7-28.7mm <i>without UltraBase; 6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 20.7-35.3mm <i>4-cell:</i> from 2.51 lb (1.1kg); <i>6-cell:</i> from 2.79 lb (1.23kg); <i>9-cell:</i> from 3.13 lb (1.39kg) | | | |
| Weight ² Case color Case material | black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell <i>4-cell:</i> up to 3.7 hr; <i>6-cell:</i> up to 7.4 hr; <i>9-cell:</i> up to 12.3 hr | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | | |
| Media slice Multicard Reader ExpressCard/54 Ports | <i>Option: ThinkPad X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | |
| PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | |

See footnotes for important warranty information
US model announced February 23, 2010

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(PEC3-2) February 2010

Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann 06/23/09 |

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

| | | |
|--|---------|--------------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann 01/07/10 |

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in X200 UltraBase (43R8781)

| | | |
|---|---------|--------------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) | 43N3417 | ann 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | |
|---|---------|--------------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann 01/07/10 |

ThinkPad Expansion

| | | |
|--|---------|--------------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann 07/28/09 |
| ThinkPad X200 UltraBase | 43R8781 | ann 08/05/08 |

Keyboard

| | | |
|---|---------|--------------|
| TrackPoint Cap Collection | 73P2698 | ann 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

Mouse

| | | |
|--|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann 01/22/08 |

Security

| | | |
|--|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| X200s (WXGA+), X201s 12W Privacy Filter | 43R2470 | ann 08/05/08 |
| X200/X200s (WXGA), X201 12W Privacy Filter | 55Y9264 | ann 04/07/09 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann 06/27/06 |

Multimedia

| | | |
|----------------------------|---------|--------------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|----------------------------|---------|--------------|

Batteries

| | | |
|-----------------------------------|---------|--------------|
| ThinkPad Battery 47 (4-cell) | 43R9253 | ann 08/05/08 |
| ThinkPad Battery 47+ (6-cell) | 43R9254 | ann 08/05/08 |
| ThinkPad Battery 47++ (9-cell) | 43R9255 | ann 08/05/08 |
| ThinkPad External Battery Charger | 40Y7625 | ann 09/20/05 |

More information at www.lenovo.com/alldaycomputing

| | | |
|----------------------------------|---------|--------------|
| ThinkPad 65W AC Adapter | 40Y7696 | ann 01/05/06 |
| ThinkPad 90W AC Adapter | 40Y7659 | ann 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | |
|-------------------------------------|---------|--------------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann 12/18/07 |

More information at www.lenovopowertips.com

Carrying Cases

Up to 12" widescreen models:

| | | |
|--------------------------|---------|--------------|
| ThinkPad 12W Case Sleeve | 51J0476 | ann 08/18/09 |
|--------------------------|---------|--------------|

Up to 13.3" widescreen models:

| | | |
|-----------------------------|---------|--------------|
| ThinkPad Ultraportable Case | 41U5062 | ann 05/13/08 |
|-----------------------------|---------|--------------|

Up to 15.4" widescreen models:

| | | |
|---|---------|--------------|
| Lenovo Messenger Max | 41U5253 | ann 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann 05/13/08 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 43R2478 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

Monitor Accessories⁴⁶

| | | |
|---|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable ⁵⁰ | 57Y4393 | ann 08/04/09 |
| DisplayPort to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

| | | |
|----------------------------------|---------|--------------|
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann 09/22/09 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115



Lenovo ThinkPad X201 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115

ThinkPad® X201 Tablet (2985) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Processor | Base (GHz) | Max turbo (GHz) | Memory | Widescreen display | Camera | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | PCle Mini Card WWAN | Battery Intel vPro | Carrier | Preload | Avail date |
|------------|-----------|------------|-----------------|--------|--------------------|--------|-------------------------------|----------------------|-------------------------|---------------------|--------------------|--------------------|---------|------------|
| 2985-EUU | i7-640LM | 2.13 | 2.93 | 2GB | 12.1" WXGA Entry | | 250G 5400 | | | WWAN upg | 4 vPro | AT&T ²³ | XP Pro | Mar 10 |
| 2985-EVU | i7-640LM | 2.13 | 2.93 | 4GB | 12.1" WXGA Entry | 2.0M | 320G 7200 | DVD±RW | UltraB | Gobi 2000 | 8 vPro | | XP Pro | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | |
|---|--|---|
| Positioning Processor | Convertible tablet ultraportable; one spindle Intel® Core™ i7 processor i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Power Manager • Presentation Director • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox |
| Memory | 2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | |
| SATA DVD±RW Ultrabay Slim SATA disk | <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 250GB ⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i> | Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Widescreen display | <i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) | |
| Camera | <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None | |
| Dimensions ³ | <i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg) | |
| Weight ² | <i>Color:</i> black; <i>Material:</i> magnesium alloy | |
| Case | Lithium Ion 4-cell or 8-cell | |
| Battery - type | <i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr | |
| Battery - life ¹⁰ | | |
| Chipset | Mobile Intel QM57 Express Chipset | |
| Media slice | <i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) | |
| Multicard Reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | |
| PCle Mini Card | Two PCI Express Mini Card slots | |
| Intel 6200 ²⁸ | 11a/b/g/n wireless, PCle Mini Card, Intel Centrino® Advanced-N 6200, 2x2 | |
| WWAN upg | <i>Some:</i> Wireless WAN upgradable | |
| Gobi™ 2000 | <i>Some:</i> Wireless WAN, Qualcomm chipset, PCle Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | |
| Carrier | <i>Some:</i> AT&T®, contract required with service provider | |
| Modem | 56K V.92 ⁶ modem | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | |
| Ethernet | Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCle x1 | |
| Intel AMT | Intel Active Management Technology (iAMT) | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

See footnotes for important warranty information
US models announced March 2, 2010

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(CML3-7) March 2010

ThinkPad® X201 Tablet (2985) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc-essor | Max Base turbo (GHz) | Memory | Widescreen display | Camera (Mega-pixel) | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Bat-tery Intel vPro Preload | Avail date |
|------------|------------|----------------------|--------|--------------------|---------------------|-------------------------------|----------------------|-------------------------|--------------------------|----------------------------|-----------------------------|------------|
| 2985-C2U | i7-640LM | 2.13 | 2.93 | 2GB | 12.1" WXGA | Entry | 250G 5400 | | Intel 6200 ²⁸ | upg | 4 vPro Pro 32 | Mar 10 |
| 2985-C3U | i7-640LM | 2.13 | 2.93 | 2GB | 12.1" WXGA | Entry | 2.0 320G 7200 | DVD±RW | UltraB Intel 6200 | upg | 8 vPro Pro 32 | Mar 10 |
| 2985-C4U | i7-640LM | 2.13 | 2.93 | 4GB | 12.1" WXGA | Entry | 2.0 320G 7200 | DVD±RW | UltraB Intel 6200 | Gobi Verizon ¹⁶ | 8 vPro Pro 32 | Mar 10 |
| 2985-C5U | i7-640LM | 2.13 | 2.93 | 4GB | 12.1" WXGA | Outdoor | 2.0 320G 7200 | | Intel 6200 | upg | 8 vPro Pro 32 | Mar 10 |
| 2985-C6U | i7-640LM | 2.13 | 2.93 | 2GB | 12.1" WXGA | Multi | 2.0 250G 5400 | | Intel 6200 | upg | 8 vPro Pro 32 | Mar 10 |
| 2985-C7U | i7-640LM | 2.13 | 2.93 | 4GB | 12.1" WXGA | Multi | 2.0 320G 7200 | DVD±RW | UltraB Intel 6200 | upg | 8 vPro Pro 32 | Mar 10 |
| 2985-EWU | i7-640LM | 2.13 | 2.93 | 4GB | 12.1" WXGA | Entry | 2.0 320G 7200 | DVD±RW | UltraB Intel 6200 | Gobi Verizon | 8 vPro Pro 64 | Mar 10 |
| 2985-EXU | i7-640LM | 2.13 | 2.93 | 4GB | 12.1" WXGA | Entry | 2.0 320G 7200 | DVD±RW | UltraB Intel 6200 | Gobi AT&T ²³ | 8 vPro Pro 64 | Mar 10 |
| 2985-EYU | i7-640LM | 2.13 | 2.93 | 4GB | 12.1" WXGA | Multi | 2.0 320G 7200 | DVD±RW | UltraB Intel 6200 | upg | 8 vPro Pro 64 | Mar 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | Convertible tablet ultraportable; one spindle Intel® Core™ i7 processor i7-640LM with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache | | | | | | | | | | Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 | |
| Memory | 2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo SimpleTap (Multi-Touch models) • Adobe® Reader® • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | |
| SATA DVD±RW Ultrabay Slim SATA disk | <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase | | | | | | | | | | Supports ThinkVantage® technologies | |
| Widescreen display | <i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless <i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) | | | | | | | | | | ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g | |
| Camera | <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | |
| Integrated graphics | Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None | | | | | | | | | | | |
| Dimensions ³ | <i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg) | | | | | | | | | | | |
| Weight ² | <i>Color:</i> black; <i>Material:</i> magnesium alloy | | | | | | | | | | | |
| Case | Lithium Ion 4-cell or 8-cell | | | | | | | | | | | |
| Battery - type | <i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr | | | | | | | | | | | |
| Battery - life ¹⁰ | | | | | | | | | | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | | | | | | | | | | |
| Media slice | <i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) | | | | | | | | | | | |
| Multicard Reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | | | | | | | | | | | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | |
| Intel 6200 ²⁸ | 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 | | | | | | | | | | | |
| WWAN upg | <i>Some:</i> Wireless WAN upgradable | | | | | | | | | | | |
| Gobi™ 2000 | <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | | | | | | | | | |
| Carrier | <i>Some:</i> AT&T® or Verizon®, contract required with service provider | | | | | | | | | | | |
| Modem | 56K V.92 ⁶ modem | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | | | | | | | | | | |
| Ethernet | Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | |
| Fingerprint reader | UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | |

See footnotes for important warranty information

US models announced March 2, 2010; previous models on February 23, 2010

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(CML3-1) March 2010

ThinkPad® X201 Tablet (2985) - TopSeller (Windows 7) - April 2010

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | Max Base turbo (GHz) (GHz) | Memory | Widescreen display | Camera (Mega- pixel) | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad X200 UltraBase | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Bat- tery Intel vPro | Preload | Avail date |
|------------|----------------|----------------------------------|--------|-----------------------|----------------------------|-------------------------------------|----------------------------|-------------------------------|-----------------------------|---------------------------|-------------------------------|----------------------------|----------------------|
| 2985-F2U | i7-620LM | 2.00 | 2.80 | 2GB | 12.1" WXGA | Entry | 2.0 | 160G 7200 | DVD±RW | UltraB | Intel 6200 ²⁸ | Gobi Verizon ¹⁶ | 8 vPro Pro 64 Apr 10 |
| 2985-F3U | i7-620LM | 2.00 | 2.80 | 2GB | 12.1" WXGA | Outdoor | 2.0 | 160G 7200 | | Intel 6200 | | 8 vPro Pro 64 Apr 10 | |
| 2985-F4U | i7-620LM | 2.00 | 2.80 | 2GB | 12.1" WXGA | Multi | 2.0 | 320G 7200 | DVD±RW | UltraB | Intel 6200 | 8 vPro Pro 64 Apr 10 | |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|---|---|--|---|
| Positioning Processor | Convertible tablet ultraportable; one spindle Intel® Core™ i7 processor i7-620LM with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache | | Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage Power Manager• ThinkVantage System Update• Fingerprint Software• ThinkVantage Toolbox• Lenovo SimpleTap (Multi-Touch models)• Adobe® Reader®• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW)• Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | | |
| SATA DVD±RW Ultrabay Slim SATA disk | <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (7200 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i> | | Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ <ul style="list-style-type: none">• Provides desktop expansion and cable management for X200 and X201 Series• Easily connects to the bottom of the X200 or X201 Series for traveling• Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:<ul style="list-style-type: none">– CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213– DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214– Serial ATA Hard Drive Bay Adapter III 43N3412Disks supported (some):<ul style="list-style-type: none">• 250GB FDE 7200 rpm 43N3410• 320GB Disk 7200 rpm 43N3411 Other features: <ul style="list-style-type: none">• Power button (front)• Stereo speakers (2 watt)• Security key lock, security keyhole, and optional security screw• Analog DB-15 monitor port• DisplayPort (supports single-link DVI-D via cable 45J7915)• Four USB 2.0 ports• Gigabit ethernet port• Microphone in and headphone out• Second battery charger• Requires 65 or 90 watt AC adapter• 1.6 lb; 730g |
| Widescreen display | <i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless <i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Integrated graphics | Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None | | |
| Dimensions ³ | <i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg) | | |
| Weight ² | <i>Color:</i> black; <i>Material:</i> magnesium alloy | | |
| Case | Lithium Ion 8-cell | | |
| Battery - type | <i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr | | |
| Battery - life ¹⁰ | | | |
| Chipset | Mobile Intel QM57 Express Chipset | | |
| Media slice | <i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) | | |
| Multicard Reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) | | |
| ExpressCard/54 | One slot (ExpressCard/34, ExpressCard/54) | | |
| Ports | Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | |
| Intel 6200 ²⁸ | 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 | | |
| WWAN upg | <i>Some:</i> Wireless WAN upgradable | | |
| Gobi™ 2000 | <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | |
| Carrier | <i>Some:</i> Verizon®, contract required with service provider | | |
| Modem | 56K V.92 ⁶ modem | | |
| Bluetooth™ | Bluetooth 2.1 wireless, LED indicator | | |
| Ethernet | Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | |
| Audio support | High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | |
| Fingerprint reader | UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information
US models announced April 20, 2010

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Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann 06/23/09 |

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

| | | |
|--|---------|--------------|
| 160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 41N5692 | ann 03/20/07 |
| 160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 41N5737 | ann 10/16/07 |
| 250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43R8152 | ann 01/15/08 |
| 250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3410 | ann 01/20/09 |
| 320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3403 | ann 08/05/08 |
| 320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹ | 43N3411 | ann 01/20/09 |
| 500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹ | 43N3420 | ann 06/23/09 |
| 500GB Disk SATA 3.0Gb/s (7200 rpm) ⁴¹ | 43N3423 | ann 01/07/10 |

⁴¹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in X200 UltraBase (43R8781)

| | | |
|---|---------|--------------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) | 43N3417 | ann 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradeable models:

| | | |
|---|---------|--------------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann 01/07/10 |

ThinkPad Expansion

| | | |
|--|---------|--------------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann 07/28/09 |
| ThinkPad X200 UltraBase | 43R8781 | ann 08/05/08 |

Keyboard

| | | |
|---|---------|--------------|
| TrackPoint Cap Collection | 73P2698 | ann 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

Mouse

| | | |
|--|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann 01/22/08 |

Security

| | | |
|---------------------------------------|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |
| ExpressCard Gemplus Smart Card Reader | 41N3043 | ann 06/27/06 |

Multimedia

| | | |
|----------------------------|---------|--------------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|----------------------------|---------|--------------|

Tablet

| | | |
|---------------------------------|---------|--------------|
| ThinkPad Digitizer Pen | 41U3143 | ann 11/14/06 |
| ThinkPad Tablet Tether (3-pack) | 41U4820 | ann 11/14/06 |

Batteries

| | | |
|---|---------|--------------|
| ThinkPad Battery 12 (4-cell) | 43R9256 | ann 09/23/08 |
| ThinkPad Battery 12++ (8-cell) | 43R9257 | ann 09/23/08 |
| ThinkPad External Battery Charger ⁴⁷ | 40Y7625 | ann 09/20/05 |

⁴⁷ Only supports *ThinkPad Battery 12 (4-cell)* 43R9256

More information at www.lenovo.com/alldaycomputing

| | | |
|----------------------------------|---------|--------------|
| ThinkPad 65W AC Adapter | 40Y7696 | ann 01/05/06 |
| ThinkPad 90W AC Adapter | 40Y7659 | ann 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | |
|-------------------------------------|---------|--------------|
| • BlackBerry charge tip (L8a) | 41R4478 | ann 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann 12/18/07 |

More information at www.lenovopowertips.com

Carrying Cases

X200 Tablet:

| | | |
|-----------------------------|---------|--------------|
| ThinkPad X200 Tablet Sleeve | 43R9115 | ann 09/23/08 |
|-----------------------------|---------|--------------|

Up to 13.3" widescreen models:

| | | |
|-----------------------------|---------|--------------|
| ThinkPad Ultraportable Case | 41U5062 | ann 05/13/08 |
|-----------------------------|---------|--------------|

Up to 15.4" widescreen models:

| | | |
|---|---------|--------------|
| Lenovo Business Messenger Case | 51J0475 | ann 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann 05/13/08 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

Monitor Accessories⁴⁶

| | | |
|---|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| Lenovo DisplayPort to VGA Monitor Cable ⁵⁰ | 57Y4393 | ann 08/04/09 |
| DisplayPort to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

| | | |
|----------------------------------|---------|--------------|
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann 09/22/09 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X301



Lenovo ThinkPad X301



Lenovo ThinkPad X301



Lenovo ThinkPad X301



Lenovo ThinkPad X301



USB Port Replicator with Digital Video
45K1610

ThinkPad® X301 (2776) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Low Voltage proc- essor | GHz | Memory | Wide- screen display | Camera | Disk SATA GB ³ RPM | EIDE optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Bat- tery Blue/ Fing cells | Preload | Avail date |
|------------|-------------------------------|------|--------|----------------------------|--------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------------|--|----------|---------------|
| 2776-3AU | SU9600 | 1.60 | 2GB | 13.3" WXGA+ | Cam | 250GB 5400 | DVD±RW | ❖ Intel 5100 ²⁸ | WWAN upg | None | Yes | 6 XP Pro | Oct 09 |
| 2776-3BU | SU9600 | 1.60 | 2GB | 13.3" WXGA+ | Cam | 80GB SSD | DVD±RW | ❖ Intel 5100 | WWAN upg | None | Yes | 6 XP Pro | Oct 09 |
| 2776-3CU | SU9600 | 1.60 | 4GB | 13.3" WXGA+ | Cam | 128GB SSD | DVD±RW | ❖ Intel 5100 | WWAN upg | None | Yes | 6 XP Pro | Oct 09 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | |
|--|--|---|
| Positioning Processor | <i>Thin and light; two spindles</i> Intel® Core™ 2 Duo processor SU9600 with ultra low voltage, dual-core , Intel HD Boost, 800MHz system bus, and 3MB L2 cache | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available | |
| EIDE DVD±RW Option Bay Serial ATA disk | Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in Modular bay for devices (DVD burner, battery), 7mm high <i>Some:</i> 80GB⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s <i>Some:</i> 250GB (5400 rpm) / SATA 1.5Gb/s, Active Protection System™ <i>All:</i> 1.8" wide, 8mm high, removable, upgradable, shock mounted storage | |
| Widescreen display Camera | 13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0 | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort) | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk) | |
| TrackPoint® Touch pad | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, supports multi-touch function | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | <i>3-cell:</i> (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm <i>6-cell:</i> (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm <i>3-cell:</i> from 3.16 lb (1.43kg); <i>6-cell:</i> from 3.35 (1.52kg) | |
| Weight ² Case color Case material | Black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell , supports optional Option Bay 3-cell battery (for two batteries) <i>3-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 5.5 hr; <i>6-cell and Option Bay battery:</i> up to 9.5 hr | |
| Chipset | Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical) | |
| ExpressCard Multicard reader Ports | None None Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | |
| Wireless antenna Mini PCI Express Intel 5100 ²⁸ WWAN upg Turbo Memory UWB Modem Bluetooth™ Ethernet Intel AMT Audio support | UltraConnect™ II Antenna / on-off switch for all wireless radios Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None None (use optional USB-based modem) Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

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|--|
| Supports ThinkVantage® technologies |
| 65-watt (GMA graphics) AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 |
| ThinkPlus 4-year LOR 9x5 NBD 41C9177 |
| ThinkPlus 5-year LOR 9x5 NBD 41C9179 |
| ThinkPlus 4-year P&L P/U Depot 41C9178 |
| ThinkPlus 5-year P&L P/U Depot 41C9180 |
| Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information
US models announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(KOD2-7) October 2009

ThinkPad® X301 (2776) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Low Voltage processor | GHz | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ RPM | EIDE optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Mini PCIe UWB or Turbo | Battery Blue/ Fing cells | Preload | Avail date |
|------------|-----------------------|------|--------|---------------------|--------|-------------------------------|--------------|---------------------------|-----------------------|------------------------|--------------------------|----------|------------|
| 2776-3DU | SU9600 | 1.60 | 4GB | 13.3" WXGA+ | Cam | 128GB SSD | DVD±RW | Intel 5100 ²⁸ | AT&T ²³ | None | Yes | 6 Pro 64 | Oct 09 |
| 2776-3NU | SU9600 | 1.60 | 2GB | 13.3" WXGA+ | Cam | 128GB SSD | DVD±RW | WiMAX | WWAN upg | None | Yes | 6 Pro 32 | Nov 09 |
| 2776-3PU | SU9600 | 1.60 | 2GB | 13.3" WXGA+ | Cam | 128GB SSD | DVD±RW | Intel 5100 | Verizon ¹⁶ | None | Yes | 6 Pro 32 | Nov 09 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | Thin and light; two spindles Intel® Core™ 2 Duo processor SU9600 with ultra low voltage, dual-core, Intel HD Boost, 800MHz system bus, and 3MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 | | |
| Memory | 2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | |
| EIDE DVD±RW Option Bay Serial ATA disk | Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in Modular bay for devices (DVD burner, battery), 7mm high 128GB⁹ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high, removable, upgradable, shock mounted storage | | | | | | | | | | | | |
| Widescreen display | 13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio | | | | | | | | | | | | |
| Camera | Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0 | | | | | | | | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort) | | | | | | | | | | | | |
| Keyboard | 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk) | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, supports multi-touch function | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | |
| Dimensions ³ | <i>3-cell:</i> (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm <i>6-cell:</i> (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm <i>3-cell:</i> from 3.16 lb (1.43kg); <i>6-cell:</i> from 3.35 (1.52kg) | | | | | | | | | | | | |
| Weight ² | | | | | | | | | | | | | |
| Case color | Black | | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell , supports optional Option Bay 3-cell battery (for two batteries) | | | | | | | | | | | | |
| Battery - life ¹⁰ | <i>3-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 5.5 hr; <i>6-cell and Option Bay battery:</i> up to 9.5 hr | | | | | | | | | | | | |
| Chipset | Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical) | | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | | |
| Multicard reader | None | | | | | | | | | | | | |
| Ports | Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | | | | | | | | | | Supports ThinkVantage® technologies | | |
| Wireless antenna | UltraConnect™ II Antenna / on-off switch for all wireless radios | | | | | | | | | | | | |
| Mini PCI Express | Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable | | | | | | | | | | | | |
| Intel 5100 ²⁸ | <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | | | | | | | | | | | |
| WiMAX | <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak) | | | | | | | | | | | | |
| WWAN upg | <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) | | | | | | | | | | | | |
| Verizon ¹⁶ | <i>Some:</i> Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon | | | | | | | | | | | | |
| AT&T ²³ | <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T | | | | | | | | | | | | |
| Turbo Memory | None | | | | | | | | | | | | |
| UWB | None | | | | | | | | | | | | |
| Modem | None (use optional USB-based modem) | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator | | | | | | | | | | | | |
| Ethernet | Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant | | | | | | | | | | | | |
| Fingerprint reader | Fingerprint reader on palm rest, swipe sensor, supports the security chip | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | | |

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

US models announced November 3, 2009; previous model on October 22, 2009

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(KOD2-8) November 2009

Memory**X300:**

| | | | |
|------------------------------------|---------|-----|----------|
| 1GB PC2-5300 DDR2 SODIMM | 40Y7734 | ann | 01/05/06 |
| 1GB PC2-5300 DDR2 SODIMM (25-Pack) | 51J0502 | ann | 03/17/09 |
| 2GB PC2-5300 DDR2 SODIMM | 40Y7735 | ann | 11/28/06 |
| 2GB PC2-5300 DDR2 SODIMM (25-Pack) | 51J0548 | ann | 03/17/09 |

X301:

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann | 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann | 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann | 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann | 03/17/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |

Storage and removable storage**X301:**

| | | | |
|---|---------|-----|----------|
| 1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm) | 43N3418 | ann | 06/23/09 |
|---|---------|-----|----------|

All:

| | | | |
|--|---------|-----|----------|
| 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) | 43N3406 | ann | 08/26/08 |
| 256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover) | 43N3417 | ann | 06/23/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)**X301 WWAN upgradable models:**

| | | | |
|--|---------|-----|----------|
| Verizon® WWAN UNDP Broadband Mini PCIe | 43R9151 | ann | 08/05/08 |
| AT&T® WWAN HSPA Broadband Mini PCIe | 43R9152 | ann | 08/26/08 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|--|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |

Security

| | | | |
|------------------------------------|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Modem

| | | | |
|----------------------|---------|-----|----------|
| USB 2.0 Lenovo Modem | 43R1814 | ann | 02/26/08 |
|----------------------|---------|-----|----------|

Batteries

| | | | |
|-----------------------------------|---------|-----|----------|
| ThinkPad Battery 49 (3-cell) | 43R1965 | ann | 02/26/08 |
| ThinkPad Battery 49+ (6-cell) | 43R1967 | ann | 02/26/08 |
| ThinkPad Battery 50 (3-cell, bay) | 43R1966 | ann | 02/26/08 |
| ThinkPad External Battery Charger | 40Y7625 | ann | 09/20/05 |

More information at www.lenovo.com/alldaycomputing

| | | | |
|----------------------------------|---------|-----|----------|
| ThinkPad 65W AC Adapter | 40Y7696 | ann | 01/05/06 |
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | | |
|-------------------------------------|---------|-----|----------|
| •Palm device charge tip (L7) | 41R4315 | ann | 12/18/07 |
| •BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| •iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| •Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com

Carrying Cases**Up to 13.3" widescreen models:**

| | | | |
|-----------------------------|---------|-----|----------|
| ThinkPad Ultraportable Case | 41U5062 | ann | 05/13/08 |
|-----------------------------|---------|-----|----------|

Up to 15.4" widescreen models:

| | | | |
|---|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶**X301:**

| | | | |
|---|---------|-----|----------|
| Lenovo DisplayPort to VGA Monitor Cable | 57Y4393 | ann | 08/04/09 |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | ann | 08/05/08 |

All:

| | | | |
|-----------------------------------|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

Partial list of Lenovo® ThinkPlus Services²² for ThinkPad notebooksFor more information see: http://www.lenovo.com/services_warranty/us/en/index.html

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| <p>ThinkPlus service upgrade options for ThinkPad W/X series</p> <p>ThinkPad X100e notebook with 1-year Mail-In warranty</p> <table> <tr> <td>2-year Mail-In repair service</td> <td>78Y1519</td> </tr> <tr> <td>3-year Mail-In repair service</td> <td>78Y1520</td> </tr> <tr> <td>1-year LOR²⁴ 9x5 Next Business Day</td> <td>78Y1517</td> </tr> <tr> <td>2-year LOR 9x5 Next Business Day</td> <td>78Y1521</td> </tr> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>78Y1522</td> </tr> </table> <p>ThinkPad X100e notebook with 1-year Depot warranty</p> <table> <tr> <td>2-year parts and labor depot repair service</td> <td>41C9169</td> </tr> <tr> <td>3-year parts and labor depot repair service</td> <td>41C9170</td> </tr> <tr> <td>1-year LOR 9x5 Next Business Day</td> <td>41C9166</td> </tr> <tr> <td>2-year LOR 9x5 Next Business Day</td> <td>41C9167</td> </tr> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>41C9168</td> </tr> </table> <p>ThinkPad X series notebook with 1-year Depot warranty</p> <table> <tr> <td>2-year parts and labor depot repair service</td> <td>41C9169</td> </tr> <tr> <td>3-year parts and labor depot repair service</td> <td>41C9170</td> </tr> <tr> <td>4-year parts and labor depot repair service</td> <td>41C9172</td> </tr> <tr> <td>5-year parts and labor depot repair service</td> <td>41C9174</td> </tr> <tr> <td>1-year LOR 9x5 Next Business Day</td> <td>41C9166</td> </tr> <tr> <td>2-year LOR 9x5 Next Business Day</td> <td>41C9167</td> </tr> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>41C9168</td> </tr> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>41C9171</td> </tr> <tr> <td>5-year LOR 9x5 Next Business Day</td> <td>41C9173</td> </tr> </table> <p>ThinkPad W/X series notebook with 3-year Depot warranty</p> <table> <tr> <td>4-year parts and labor depot repair service</td> <td>41C9178</td> </tr> <tr> <td>5-year parts and labor depot repair service</td> <td>41C9180</td> </tr> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>41C9176</td> </tr> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>41C9177</td> </tr> <tr> <td>5-year LOR 9x5 Next Business Day</td> <td>41C9179</td> </tr> </table> <p>ThinkPad W/X series notebook with 3-year Onsite warranty</p> <table> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>12X5630</td> </tr> <tr> <td>5-year LOR 9x5 Next Business Day</td> <td>43R2162</td> </tr> </table> | 2-year Mail-In repair service | 78Y1519 | 3-year Mail-In repair service | 78Y1520 | 1-year LOR ²⁴ 9x5 Next Business Day | 78Y1517 | 2-year LOR 9x5 Next Business Day | 78Y1521 | 3-year LOR 9x5 Next Business Day | 78Y1522 | 2-year parts and labor depot repair service | 41C9169 | 3-year parts and labor depot repair service | 41C9170 | 1-year LOR 9x5 Next Business Day | 41C9166 | 2-year LOR 9x5 Next Business Day | 41C9167 | 3-year LOR 9x5 Next Business Day | 41C9168 | 2-year parts and labor depot repair service | 41C9169 | 3-year parts and labor depot repair service | 41C9170 | 4-year parts and labor depot repair service | 41C9172 | 5-year parts and labor depot repair service | 41C9174 | 1-year LOR 9x5 Next Business Day | 41C9166 | 2-year LOR 9x5 Next Business Day | 41C9167 | 3-year LOR 9x5 Next Business Day | 41C9168 | 4-year LOR 9x5 Next Business Day | 41C9171 | 5-year LOR 9x5 Next Business Day | 41C9173 | 4-year parts and labor depot repair service | 41C9178 | 5-year parts and labor depot repair service | 41C9180 | 3-year LOR 9x5 Next Business Day | 41C9176 | 4-year LOR 9x5 Next Business Day | 41C9177 | 5-year LOR 9x5 Next Business Day | 41C9179 | 4-year LOR 9x5 Next Business Day | 12X5630 | 5-year LOR 9x5 Next Business Day | 43R2162 | <p>ThinkPlus Secure Business</p> <p>Lenovo Online Data Backup</p> <ul style="list-style-type: none"> Secure offsite data storage 256-bit Advanced Encryption System Data recovery or access in case of an unforeseen event Automatic, remote management Choose which business critical data to back up <table> <tr> <td>1-year Lenovo Online Data Backup - 10GB</td> <td>51J0787</td> </tr> <tr> <td>1-year Lenovo Online Data Backup - 25GB</td> <td>51J0795</td> </tr> <tr> <td>1-year Lenovo Online Data Backup - 50GB</td> <td>45K5849</td> </tr> <tr> <td>1-year Lenovo Online Data Backup - Unlimited</td> <td>45K5870</td> </tr> </table> <p>ThinkPad notebook with 1-year Depot warranty</p> <table> <tr> <td>1-year Secure Business</td> <td>55Y2380</td> </tr> <tr> <td> <ul style="list-style-type: none"> 1-year Lenovo Onsite Repair service upgrade 1-year ThinkPad Protection 1-year 50GB Lenovo Online Data Backup </td> <td></td> </tr> <tr> <td>3-year Secure Business</td> <td>55Y2381</td> </tr> <tr> <td> <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup </td> <td></td> </tr> </table> <p>ThinkPad notebook with 3-year Depot warranty</p> <table> <tr> <td>3-year Secure Business</td> <td>45K5893</td> </tr> <tr> <td> <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup </td> <td></td> </tr> </table> | 1-year Lenovo Online Data Backup - 10GB | 51J0787 | 1-year Lenovo Online Data Backup - 25GB | 51J0795 | 1-year Lenovo Online Data Backup - 50GB | 45K5849 | 1-year Lenovo Online Data Backup - Unlimited | 45K5870 | 1-year Secure Business | 55Y2380 | <ul style="list-style-type: none"> 1-year Lenovo Onsite Repair service upgrade 1-year ThinkPad Protection 1-year 50GB Lenovo Online Data Backup | | 3-year Secure Business | 55Y2381 | <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup | | 3-year Secure Business | 45K5893 | <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup | | | | | | | | | | | | | |
| 2-year Mail-In repair service | 78Y1519 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1-year LOR ²⁴ 9x5 Next Business Day | 78Y1517 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-year LOR 9x5 Next Business Day | 78Y1521 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-year LOR 9x5 Next Business Day | 78Y1522 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-year parts and labor depot repair service | 41C9169 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-year parts and labor depot repair service | 41C9170 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-year LOR 9x5 Next Business Day | 41C9166 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-year LOR 9x5 Next Business Day | 41C9167 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-year LOR 9x5 Next Business Day | 41C9168 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-year parts and labor depot repair service | 41C9169 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-year parts and labor depot repair service | 41C9170 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4-year parts and labor depot repair service | 41C9172 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5-year parts and labor depot repair service | 41C9174 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-year LOR 9x5 Next Business Day | 41C9166 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-year LOR 9x5 Next Business Day | 41C9167 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-year LOR 9x5 Next Business Day | 41C9168 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4-year LOR 9x5 Next Business Day | 41C9171 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5-year LOR 9x5 Next Business Day | 41C9173 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4-year parts and labor depot repair service | 41C9178 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5-year parts and labor depot repair service | 41C9180 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-year LOR 9x5 Next Business Day | 41C9176 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4-year LOR 9x5 Next Business Day | 41C9177 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5-year LOR 9x5 Next Business Day | 41C9179 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4-year LOR 9x5 Next Business Day | 12X5630 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5-year LOR 9x5 Next Business Day | 43R2162 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-year Lenovo Online Data Backup - 10GB | 51J0787 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-year Lenovo Online Data Backup - 25GB | 51J0795 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-year Lenovo Online Data Backup - 50GB | 45K5849 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-year Lenovo Online Data Backup - Unlimited | 45K5870 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-year Secure Business | 55Y2380 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> 1-year Lenovo Onsite Repair service upgrade 1-year ThinkPad Protection 1-year 50GB Lenovo Online Data Backup | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-year Secure Business | 55Y2381 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 3-year Secure Business | 45K5893 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 5-year parts and labor depot repair service | 45K6025 | 3-year LOR 9x5 Next Business Day | 45K6021 | 4-year LOR 9x5 Next Business Day | 45K6022 | 5-year LOR 9x5 Next Business Day | 45K6024 | 4-year LOR 9x5 Next Business Day | 45K6038 | 5-year LOR 9x5 Next Business Day | 43R2162 | <p>ThinkPlus Priority Support for enterprise customers</p> <ul style="list-style-type: none"> 9x5 next-business-day response Lenovo Onsite Repair 24x7 support with priority routing and advanced level technicians <p>ThinkPad notebook with 1-year Depot warranty</p> <table> <tr> <td>3-year Priority Support</td> <td>45J9094</td> </tr> </table> <p>ThinkPad notebook with 3-year Depot warranty</p> <table> <tr> <td>3-year Priority Support</td> <td>45J9095</td> </tr> <tr> <td>4-year Priority Support</td> <td>45J9096</td> </tr> <tr> <td>5-year Priority Support</td> <td>45J9097</td> </tr> <tr> <td>3-year Priority Support 4-hour response</td> <td>45J9101</td> </tr> <tr> <td>4-year Priority Support 4-hour response</td> 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Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

¹ Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.

² **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.

³ **Thinness** may vary at certain points on the system.

⁴ **Wireless capability:** Requires compatible wireless-enabled options sold separately.

⁵ **TAA:** ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.

⁶ **Public network download modem speeds** are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

⁷ **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.

⁸ **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

⁹ **CD/DVD drive speeds** list maximum rates; rates are variable and are often less than the maximum.

¹⁰ **Battery:** These model numbers achieved the battery life based on MobileMark® 2007 during testing. For the ThinkPad X300, battery life is based on Business Winstone Battery Mark 2002. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

¹¹ **External monitor:** This system supports a maximum of two external monitors. The integrated display(s) must be disabled to support two external monitors.

¹² **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

¹³ **Internet access not included.**

¹⁴ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

¹⁶ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.

¹⁷ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

¹⁸ **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.

¹⁹ **EasyServ depot repair service:** In the United States call 1-800-426-7378. The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.

²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

²¹ **For combination drives**, maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.

²² **ThinkPlus Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.

²³ **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

²⁴ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. In the United States call 1-800-426-7378. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.

²⁶ **Full-size keyboard:** As defined by ISO/IEC 15412.

²⁷ **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

²⁸ **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

³⁰ **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

³² **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

³⁶ **Wireless upgradable** allows the system to be wireless-enabled with an optional wireless Mini PCI or Mini PCI Express card. Designed to operate only with Lenovo options.

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Visit www.lenovo.com/safecomputing periodically for the latest information on safe and effective computing.

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Morrisville, NC 27560
U.S.A.

April 2010
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Personal Systems Reference Lenovo® ThinkPad® Edge Series and SL Series TopSeller™ Notebooks

April 2010 - Version 376



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ThinkPad®



Lenovo® ThinkPad Edge 13"



Lenovo ThinkPad Edge 13"
(Glossy black model)



Lenovo ThinkPad Edge 13"
(Glossy red model)



ThinkPad Battery 73+ (6-cell) 57Y4565
ThinkPad Battery 73 (4-cell) 57Y4564



USB 2.0 Portable DVD Burner
43N3264



Lenovo ThinkPad Edge 13"

| Type-model | Processor | GHz | Memory | Wide-screen display | Camera | Integrated graphics | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Top color | Blue-tooth | Battery cells | Preload | Avail date |
|------------|-----------|------|------------|---------------------|--------|---------------------|-------------------------------|-----------------------|---------------------|--------------|------------|---------------|-----------|------------|
| 0196-24U | SU7300 | 1.30 | 3GB | 13.3" HD | 0.3M | GMA | 320G 7200 | Intel 1000 | None | Matte black | Blue | 6 | Pro 32 | Jan 10 |
| 0196-4YU | SU7300 | 1.30 | 3GB | 13.3" HD | 0.3M | GMA | 320G 7200 | Intel 1000 | None | Glossy black | Blue | 6 | Pro 32 | Jan 10 |
| 0196-5DU | SU7300 | 1.30 | 2GB | 13.3" HD | 0.3M | GMA | 250G 5400 | Intel 1000 | None | Glossy red | | 6 | Pro 32 | Apr 10 |
| 0196-5EU | SU7300 | 1.30 | 3GB | 13.3" HD | 0.3M | GMA | 250G 5400 | WiMAX | None | Matte black | Blue | 6 | Pro 32 | Apr 10 |
| 0196-5FU | SU7300 | 1.30 | 2GB | 13.3" HD | 0.3M | GMA | 250G 5400 | Intel 1000 | None | Matte black | | 6 | Home P 64 | Apr 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|---|--|--|---|
| Positioning Processor | Sophisticated design with quality, durability and reliability for SMB customers; one spindle Intel® Core™ 2 Duo processor SU7300 with ultra low voltage, dual-core, 800MHz system bus, and 3MB L2 cache | | Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch |
| Memory | 2GB or 3GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| Optical drive SATA disk | None (use optional USB Portable DVD Burner 43N3264) 250GB ⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s or 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™ | | |
| Widescreen display Camera | 13.3" (338mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 200 nits, 16:9 aspect ratio, 400:1 contrast ratio Camera on top of screen, 0.3-megapixel, low light sensitive | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution:</i> 2048x1536@75Hz | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch None | | |
| Dimensions ³ Weight ² Case color | 13.3W" (WxDxH): 12.7" x 9.0" x 1.0"; 322 x 228mm x 25.4mm (excluding battery bump) <i>4-cell:</i> starting at 3.59 lb (1.63kg); <i>6-cell:</i> starting at 3.81 lb (1.73kg) Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom | | Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Case material Battery - type ³⁷ Battery - life ¹⁰ | Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell <i>4-cell:</i> up to 5.3 hr; <i>6-cell:</i> up to 8.0 hr | | |
| Chipset | Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M I/O Controller Hub | | |
| ExpressCard Smart Card Read Multicard Reader Ports | None None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, XD) Three USB 2.0 (one powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | |
| PCIe Mini Card Intel 1000 WiMAX | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX | | |
| WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | None None <i>Some:</i> Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Conexant® CX20582 codec / stereo speakers, 1 watt x 2/ mono microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security Security chip Fingerprint reader | None None None | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information

US models announced April 6, 2010; previous models on January 5, 2010

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(PAR1-1) April 2010

ThinkPad® Edge 13" 0197 (AMD) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Top color | Blue- tooth | Battery cells | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------|------------------------|-------------------------------------|-----------------------------|---------------------------|--------------|----------------|------------------|-----------|---------------|
| 0197-26U | L325 | 1.50 | 2GB | 13.3" HD | 0.3M | HD 3200 | 250G 5400 | 11b/g/n | None | Matte black | None | 4 | Home P 64 | Jan 10 |
| 0197-27U | L325 | 1.50 | 3GB | 13.3" HD | 0.3M | HD 3200 | 250G 5400 | 11b/g/n | None | Matte black | None | 6 | Pro 32 | Jan 10 |
| 0197-6XU | L325 | 1.50 | 3GB | 13.3" HD | 0.3M | HD 3200 | 250G 5400 | 11b/g/n | None | Glossy black | None | 6 | Pro 32 | Jan 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|--------------------------------|---|--|---|
| Positioning Processor | Sophisticated design with quality, durability and reliability for SMB customers; one spindle AMD® Athlon™ Neo X2 Dual-Core processor L325 with dual-core, virtualization technology, integrated DDR2 memory controller, and 1MB L2 cache | | Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Memory | 2GB or 3GB std / 4GB max ⁷ / PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| Optical drive SATA disk | None (use optional USB Portable DVD Burner 43N3264) 250GB ⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™ | | |
| Widescreen display | 13.3" (338mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 200 nits, 16:9 aspect ratio, 400:1 contrast ratio | | |
| Camera | Camera on top of screen, 0.3-megapixel, low light sensitive | | |
| Integrated graphics | ATI™ Radeon™ HD 3200 graphics , in M780G, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 2456x1536@60Hz</i> | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch | | |
| ThinkLight™ | None | | |
| Dimensions ³ | 13.3W" (WxDxH): 12.7" x 9.0" x 1.0"; 322 x 228mm x 25.4mm (excluding battery bump) | | |
| Weight ² | 4-cell: starting at 3.61 lb (1.64kg); 6-cell: starting at 3.83 lb (1.74kg) | | |
| Case color | Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | |
| Battery - type ³⁷ | Lithium Ion 4-cell or 6-cell | | |
| Battery - life ¹⁰ | L325 models with 4-cell: up to 3.3 hr; 6-cell: up to 5.0 hr | | |
| Chipset | AMD M780G Chipset , SB710 south bridge | | |
| ExpressCard | None | | |
| Smart Card Read | None | | |
| Multicard Reader | 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, XD) | | |
| Ports | Three USB 2.0 (one powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | |
| 11b/g/n | 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® RTL8191SE | | |
| WWAN upg | None | | |
| Modem | None | | |
| Bluetooth™ | None | | |
| Ethernet | Realtek RTL8111DL Gigabit Network Connection | | |
| Audio support | High Definition (HD) Audio, Conexant® CX20582 codec / stereo speakers, 1 watt x 2/ mono microphone, combo audio/mic jack | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security chip | None | | |
| Fingerprint reader | None | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information
US models announced January 5, 2010

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(PAR1-2) January 2010

Memory*0196 with Intel processors:*

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |

0197 with AMD processors:

| | | | |
|------------------------------------|---------|-----|----------|
| 1GB PC2-5300 DDR2 SODIMM | 40Y7734 | ann | 01/05/06 |
| 1GB PC2-5300 DDR2 SODIMM (25-Pack) | 51J0502 | ann | 03/17/09 |
| 2GB PC2-5300 DDR2 SODIMM | 40Y7735 | ann | 11/28/06 |
| 2GB PC2-5300 DDR2 SODIMM (25-Pack) | 51J0548 | ann | 03/17/09 |

Storage and removable storage

| | | | |
|---|---------|-----|----------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)*Only WWAN upgradable models:*

| | | | |
|---|---------|-----|----------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann | 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann | 01/07/10 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultraslim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|---|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann | 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann | 11/25/08 |

Security

| | | | |
|-------------------------------------|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Modem

| | | | |
|----------------------|---------|-----|----------|
| USB 2.0 Lenovo Modem | 43R1814 | ann | 02/26/08 |
|----------------------|---------|-----|----------|

Batteries³⁷

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 73 (4-cell) | 57Y4564 | ann | 01/05/10 |
| ThinkPad Battery 73+ (6-cell) | 57Y4565 | ann | 01/05/10 |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |

⁴⁴ Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.More information at www.lenovo.com/alldaycomputing

| | | | |
|---------------------------------------|---------|-----|----------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | ann | 01/05/06 |
|---------------------------------------|---------|-----|----------|

⁴⁵ Only compatible with the integrated graphics models.

| | | | |
|-----------------------------------|---------|-----|----------|
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultraslim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters*Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493*

| | | | |
|-------------------------------------|---------|-----|----------|
| •Palm device charge tip (L7) | 41R4315 | ann | 12/18/07 |
| •BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| •iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| •Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com**Carrying Cases**

| | | | |
|---|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|-----------------------------------|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessoriesAccessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad Edge 14"



Lenovo ThinkPad Edge 14"
(Glossy black model)



Lenovo ThinkPad Edge 14"



USB Port Replicator with Digital Video
45K1610



Lenovo ThinkPad Edge 14"

ThinkPad® Edge 14" 0578 (Intel) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | Disk SATA GB ⁸ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Top color | Finger print reader | Blue-tooth | Battery cells | Preload | Avail date |
|---|--|------|--------|---------------------|-------------------------------|--------------------------|---------------------|-----------------------|--------------|--|------------|---------------|-----------|------------|
| 0578-23U | i3-350M | 2.26 | 3GB | 14.0" HD | 320G 7200 | Intel 6200 ²⁸ | | | Matte black | | | 6 | Pro 64 | Mar 10 |
| 0578-25U | i3-330M | 2.13 | 4GB | 14.0" HD | 250G 5400 | 11b/g/n | | | Matte black | | | 4 | Home P 64 | Mar 10 |
| 0578-27U | i3-330M | 2.13 | 2GB | 14.0" HD | 250G 5400 | Intel 1000 | | | Glossy black | | | 6 | Pro 32 | Mar 10 |
| 0578-29U | i3-330M | 2.13 | 2GB | 14.0" HD | 250G 5400 | Intel 1000 | | | Glossy black | | | 6 | Home P 64 | Mar 10 |
| 0578-2AU | i3-330M | 2.13 | 4GB | 14.0" HD | 250G 5400 | Intel 1000 | Gobi 2000 | AT&T ²³ | Glossy black | | Blue | 6 | Pro 64 | Mar 10 |
| 0578-2BU | i3-330M | 2.13 | 4GB | 14.0" HD | 320G 7200 | Intel 1000 | Gobi 2000 | Verizon ¹⁶ | Glossy black | | Blue | 6 | Pro 64 | Mar 10 |
| 0578-65U | i3-330M | 2.13 | 4GB | 14.0" HD | 320G 7200 | Intel 1000 | | | Glossy black | Finger | Blue | 6 | Pro 64 | Mar 10 |
| 0578-66U | i3-330M | 2.13 | 3GB | 14.0" HD | 320G 7200 | Intel 1000 | | | Glossy red | | Blue | 6 | Home P 64 | Mar 10 |
| 0578-28U | Cel P4500 | 1.86 | 2GB | 14.0" HD | 250G 5400 | Intel 1000 | | | Glossy black | | | 6 | Home P 64 | Apr 10 |
| 0578-64U | Cel P4500 | 1.86 | 2GB | 14.0" HD | 250G 5400 | Intel 1000 | | | Glossy black | | | 6 | Pro 32 | Apr 10 |
| 0578-7ZU | Cel P4500 | 1.86 | 2GB | 14.0" HD | 250G 5400 | Intel 1000 | | | Matte black | | | 6 | Home P 64 | Apr 10 |
| 0578-82U | i3-330M | 2.13 | 2GB | 14.0" HD | 250G 5400 | Intel 1000 | | | Matte black | | | 6 | Pro 32 | Apr 10 |
| 0578-83U | i3-330M | 2.13 | 3GB | 14.0" HD | 250G 5400 | Intel 1000 | | | Glossy red | | Blue | 6 | Pro 32 | Apr 10 |
| 0578-84U | i3-330M | 2.13 | 3GB | 14.0" HD | 250G 5400 | Intel 1000 | Gobi 2000 | AT&T | Glossy black | | Blue | 6 | Pro 32 | Apr 10 |
| 0578-85U | i3-330M | 2.13 | 2GB | 14.0" HD | 250G 5400 | Intel 1000 | | | Matte black | | | 6 | Home P 64 | Apr 10 |
| 0578-86U | i3-330M | 2.13 | 4GB | 14.0" HD | 320G 7200 | Intel 1000 | | | Matte black | | Blue | 6 | Pro 64 | Apr 10 |
| 0578-C5U | i3-350M | 2.26 | 2GB | 14.0" HD | 320G 7200 | Intel 1000 | | | Matte black | | Blue | 6 | Pro 64 | Apr 10 |
| 0578-C6U | i3-350M | 2.26 | 4GB | 14.0" HD | 500G 7200 | Intel 1000 | | | Glossy black | | Blue | 6 | Pro 64 | Apr 10 |
| Positioning Processor | Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Celeron® Processor P4500 with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), and 2MB cache Intel Core™ i3 processor i3-330M or i3-350M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache | | | | | | | | | Preloaded operating system²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 32 - Some: Genuine Windows 7 Professional 64 | | | | |
| Memory | 2GB, 3GB, or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch | | | | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 250GB⁸ (5400 rpm), 320GB (7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | | | | |
| Widescreen display Camera | 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus | | | | | | | | | | | | | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution:</i> 2048x1536@75Hz; 1920x1080 (HDMI port) | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad | 6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch | | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case color | 14.0W" (WxDxH): 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm <i>4-cell:</i> from 4.72 lb (2.14kg); <i>6-cell:</i> from 4.9 lb (2.22kg); <i>9-cell:</i> from 5.29 lb (2.40kg) Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | | | | |
| Case material Battery - type ³⁷ Battery - life ¹⁰ | Lithium Ion 4-cell or 6-cell <i>4-cell:</i> up to 2.9 hr; <i>6-cell:</i> up to 4.5 hr | | | | | | | | | | | | | |
| Chipset ExpressCard/34 Multicard Reader Ports | Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card 11b/g/n Intel 1000 Intel 6200 ²⁸ Gobi™ 2000 | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | | | | | | | | | | | | | |
| Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> AT&T® or Verizon®, contract required with service provider None <i>Some:</i> Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole None <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | | | |
| | | | | | | | | | | Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | | | |

See footnotes for important warranty information

US models announced April 13, 2010; previous models on March 23 or April 6 2010

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Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |

Storage and removable storage

| | | | |
|-------------------------------------|---------|-----|----------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |

| | | | |
|---|---------|-----|----------|
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | | |
|---|---------|-----|----------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann | 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann | 01/07/10 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| UltraSlim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|---|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann | 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann | 11/25/08 |

Security

| | | | |
|-------------------------------------|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Modem

| | | | |
|----------------------|---------|-----|----------|
| USB 2.0 Lenovo Modem | 43R1814 | ann | 02/26/08 |
|----------------------|---------|-----|----------|

Batteries³⁷

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 25 (4-cell) | 51J0498 | ann | 10/22/09 |
| ThinkPad Battery 25+ (6-cell) | 51J0499 | ann | 10/22/09 |
| ThinkPad Battery 25++ (9-cell) | 51J0500 | ann | 10/22/09 |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |

⁴⁴ Requires the *ThinkPad 90W AC Adapter*

40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputingThinkPad 65W AC Adapter⁴⁵ 40Y7696 ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.ThinkPad 90W AC Adapter 40Y7659 ann 09/20/05
90W Ultrastim AC/DC Combo Adapter 41R4493 ann 09/22/09More info at www.lenovo.com/support/poweradapters*Charging tips for 90W Ultrastim AC/DC Combo Adapter* 41R4493

| | | | |
|-------------------------------------|---------|-----|----------|
| •Palm device charge tip (L7) | 41R4315 | ann | 12/18/07 |
| •BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| •iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| •Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com**Carrying Cases**

| | | | |
|---|---------|-----|----------|
| ThinkPad 14W Case Sleeve | 57Y4294 | ann | 03/16/10 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|-----------------------------------|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security
Other accessories at www.lenovo.com/accessoriesAccessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad Edge 15"



Lenovo ThinkPad Edge 15"
(Glossy black model)



Lenovo ThinkPad Edge 15"



Lenovo ThinkPad Edge 15"
(Glossy red model)



Lenovo ThinkPad Edge 15"

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | Screen type | Disk SATA GB ³ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Top color | Finger print reader | Bat- tooth cells | Preload | Avail date | |
|------------|----------------|------|--------|----------------------------|----------------|-------------------------------------|-----------------------------|---------------------------|-----------------------|--------------|---------------------------|------------------------|---------|---------------|--------|
| 0301-23U | i3-350M | 2.26 | 4GB | 15.6" HD | Glossy | 320G 7200 | Intel 6200 ²⁸ | | | Matte black | | 6 | Pro 64 | Mar 10 | |
| 0301-25U | i3-330M | 2.13 | 4GB | 15.6" HD | Glossy | 250G 5400 | 11b/g/n | | | Matte black | | 4 | Home P | Mar 10 | |
| 0301-26U | i3-330M | 2.13 | 2GB | 15.6" HD | | 250G 5400 | Intel 1000 | | | Glossy black | | 6 | Pro 32 | Mar 10 | |
| 0301-27U | i3-330M | 2.13 | 2GB | 15.6" HD | | 320G 7200 | Intel 1000 | Gobi 2000 | AT&T ²³ | Glossy black | Blue | 6 | Pro 32 | Mar 10 | |
| 0301-29U | i3-330M | 2.13 | 2GB | 15.6" HD | Glossy | 250G 5400 | Intel 1000 | | | Glossy black | | 6 | Home P | Mar 10 | |
| 0301-2AU | i3-330M | 2.13 | 4GB | 15.6" HD | | 250G 5400 | Intel 1000 | Gobi 2000 | AT&T | Glossy black | Blue | 6 | Pro 64 | Mar 10 | |
| 0301-2BU | i3-330M | 2.13 | 4GB | 15.6" HD | | 250G 5400 | Intel 1000 | Gobi 2000 | Verizon ¹⁶ | Glossy black | Blue | 6 | Pro 64 | Mar 10 | |
| 0301-5PU | i3-330M | 2.13 | 2GB | 15.6" HD | | 320G 7200 | Intel 1000 | Gobi 2000 | Verizon | Glossy black | Finger | Blue | 6 | Pro 32 | Mar 10 |
| 0301-5QU | i3-330M | 2.13 | 2GB | 15.6" HD | | 250G 5400 | Intel 1000 | | | Glossy red | | Blue | 6 | Pro 32 | Mar 10 |
| 0301-5RU | i3-330M | 2.13 | 3GB | 15.6" HD | | 320G 7200 | Intel 1000 | | | Glossy red | | Blue | 6 | Home P | Mar 10 |
| 0301-5SU | i3-330M | 2.13 | 4GB | 15.6" HD | | 320G 7200 | Intel 1000 | | | Glossy black | Finger | Blue | 6 | Pro 64 | Mar 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | |
|---|--|--|
| Positioning Processor | Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3 processor i3-330M or i3-350M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache | Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® 7 Home Premium 64 - <i>Some:</i> Genuine Windows 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch |
| Memory | 2GB, 3GB, or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 250GB ⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™ | |
| Widescreen display | <i>Some:</i> 15.6" (395mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution:</i> 2048x1536@75Hz; 1920x1080 (HDMI port) | |
| Keyboard TrackPoint® Touch pad | 6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch | |
| ThinkLight™ | None | |
| Dimensions ³ Weight ² Case color | 15.6W" (WxDxH): 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm <i>4-cell:</i> from 5.32 lb (2.42kg); <i>6-cell:</i> from 5.50 lb (2.50kg); <i>9-cell:</i> from 5.89 lb (2.67kg) Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom | |
| Case material Battery - type ³⁷ Battery - life ¹⁰ | Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 4-cell or 6-cell <i>4-cell:</i> up to 2.9 hr; <i>6-cell:</i> up to 4.5 hr | |
| Chipset ExpressCard/34 Multicard Reader Ports | Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | |
| PCIe Mini Card 11b/g/n Intel 1000 Intel 6200 ²⁸ Gobi™ 2000 | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider | |
| Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> AT&T® or Verizon®, contract required with service provider None <i>Some:</i> Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole None <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |

See footnotes for important warranty information
US models announced March 23, 2010

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(LDN1-1) March 2010

| Type-model | Processor | GHz | Memory | Wide-screen display | Screen type | Disk SATA GB ³ rpm | PCIe Mini Card 802.11 | PCIe Mini Card WWAN | Carrier | Top color | Finger print reader | Blue-tooth | Preload | Avail date |
|------------|-----------|------|--------|---------------------|-------------|-------------------------------|-----------------------|---------------------|--------------------|--------------|---------------------|------------|-----------|------------|
| 0301-28U | Cel P4500 | 1.86 | 2GB | 15.6" HD | Glossy | 250G 5400 | Intel 1000 | | | Glossy black | | | Home P 64 | Apr 10 |
| 0301-5NU | Cel P4500 | 1.86 | 2GB | 15.6" HD | Glossy | 250G 5400 | Intel 1000 | | | Matte black | | | Home P 64 | Apr 10 |
| 0301-8GU | i3-330M | 2.13 | 2GB | 15.6" HD | | 250G 5400 | Intel 1000 | | | Matte black | | | Pro 32 | Apr 10 |
| 0301-8HU | i3-330M | 2.13 | 4GB | 15.6" HD | | 320G 7200 | WiMAX | | | Matte black | Finger | Blue | Pro 64 | Apr 10 |
| 0301-8JU | i3-330M | 2.13 | 2GB | 15.6" HD | Glossy | 250G 5400 | Intel 1000 | | | Matte black | | | Home P 64 | Apr 10 |
| 0301-8KU | i3-330M | 2.13 | 4GB | 15.6" HD | | 320G 7200 | Intel 1000 | | | Matte black | | Blue | Pro 64 | Apr 10 |
| 0301-9AU | i3-330M | 2.13 | 2GB | 15.6" HD | | 250G 5400 | Intel 1000 | Gobi 2000 | AT&T ²³ | Glossy black | | | Pro 32 | Apr 10 |
| 0301-9CU | i3-350M | 2.26 | 2GB | 15.6" HD | | 320G 7200 | Intel 1000 | | | Matte black | | Blue | Pro 64 | Apr 10 |
| 0301-9DU | i3-350M | 2.26 | 4GB | 15.6" HD | | 500G 7200 | Intel 1000 | | | Glossy black | | Blue | Pro 64 | Apr 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | |
|---|---|--|--|--|--|--|
| Positioning Processor | Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Celeron® Processor P4500 with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), and 2MB cache Intel Core™ i3 processor i3-330M or i3-350M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache | | | Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® 7 Home Premium 64 - <i>Some:</i> Genuine Windows 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64 | | |
| Memory | 2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-Italics:</i> standard memory in one socket; one socket available | | | Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch | | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 250GB ⁸ (5400 rpm), 320GB (7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™ | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (395mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | |
| Camera | Camera on top of screen, 2.0-megapixel, fixed focus | | | | | |
| Integrated graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution:</i> 2048x1536@75Hz; 1920x1080 (HDMI port) | | | | | |
| Keyboard TrackPoint® Touch pad | 6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch | | | | | |
| ThinkLight™ | None | | | | | |
| Dimensions ³ Weight ² Case color | <i>15.6W"</i> (WxDxH): 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm <i>4-cell:</i> from 5.32 lb (2.42kg); <i>6-cell:</i> from 5.50 lb (2.50kg); <i>9-cell:</i> from 5.89 lb (2.67kg) Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom | | | Supports ThinkVantage® technologies | | |
| Case material Battery - type ³⁷ Battery - life ¹⁰ | Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell <i>4-cell:</i> up to 2.9 hr; <i>6-cell:</i> up to 4.5 hr | | | 65-watt AC adapter EPEAT™ Gold rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | |
| Chipset ExpressCard/34 Multicard Reader Ports | Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | | | | |
| PCIe Mini Card Intel 1000 WiMAX Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider <i>Some:</i> AT&T®, contract required with service provider None <i>Some:</i> Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor | | | ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | |
| Security Security chip Fingerprint reader | None <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | |

See footnotes for important warranty information

US models announced April 13, 2010; previous models on April 6, 2010

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(LDN1-2) April 2010

Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |

Storage and removable storage

| | | | |
|-------------------------------------|---------|-----|----------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |

| | | | |
|---|---------|-----|----------|
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | | |
|---|---------|-----|----------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann | 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann | 01/07/10 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| UltraSlim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Lenovo USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|---|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann | 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann | 11/25/08 |

Security

| | | | |
|-------------------------------------|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Modem

| | | | |
|----------------------|---------|-----|----------|
| USB 2.0 Lenovo Modem | 43R1814 | ann | 02/26/08 |
|----------------------|---------|-----|----------|

Batteries³⁷

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 25 (4-cell) | 51J0498 | ann | 10/22/09 |
| ThinkPad Battery 25+ (6-cell) | 51J0499 | ann | 10/22/09 |
| ThinkPad Battery 25++ (9-cell) | 51J0500 | ann | 10/22/09 |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |

⁴⁴ Requires the *ThinkPad 90W AC Adapter*

40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputingThinkPad 65W AC Adapter⁴⁵ 40Y7696 ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.ThinkPad 90W AC Adapter 40Y7659 ann 09/20/05
90W Ultrastim AC/DC Combo Adapter 41R4493 ann 09/22/09More info at www.lenovo.com/support/poweradapters*Charging tips for 90W Ultrastim AC/DC Combo Adapter* 41R4493

| | | | |
|-------------------------------------|---------|-----|----------|
| •Palm device charge tip (L7) | 41R4315 | ann | 12/18/07 |
| •BlackBerry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| •iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| •Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com**Carrying Cases**

| | | | |
|---|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann | 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann | 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann | 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann | 05/13/08 |

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|-----------------------------------|---------|-----|----------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann | 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security
Other accessories at www.lenovo.com/accessoriesAccessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410 buttons



Lenovo ThinkPad SL410 lights

ThinkPad® SL410 2842 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Type-model | Processor | GHz | Memory | Wide-screen display | CCFL or LED | Screen type | Cam-era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Blue-tooth | Finger print | Bat-tery cells | Pre-load | Avail date |
|------------|-----------|------|--------|---------------------|-------------|-------------|---------|---------------------|-------------------------------|--------------|----------------------------|----------------|------------|--------------|----------------|----------|------------|
| 2842-5GU | T5870 | 2.00 | 2GB | 14.0" HD | LED | Glossy | | GMA | 160G 5400 | DVD±RW | * Intel 5100 ²⁸ | None | | | 6 | XP Pro | Oct 09 |
| 2842-5HU | T5870 | 2.00 | 3GB | 14.0" HD | LED | Glossy | 2.0M | GMA | 250G 5400 | DVD±RW | * Intel 5100 | None | | | 6 | XP Pro | Oct 09 |
| 2842-5JU | T6670 | 2.20 | 4GB | 14.0" HD | LED | Glossy | 2.0M | GMA | 320G 5400 | DVD±RW | * Intel 5100 | None | Blue | Fing | 6 | XP Pro | Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|--------------------------------|--|--|---|
| Processor | Intel® Core™ 2 Duo processor T5870 or T6670 with dual-core, 800MHz system bus, and 2MB L2 cache | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage Power Manager• ThinkVantage System Update• Fingerprint Software (fingerprint models)• ThinkVantage Toolbox• Lenovo Online Data Backup• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB, 3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 160GB ® (5400 rpm), 250GB (5400 rpm), or 320GB (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display | 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 2.0-megapixel, fixed focus, on top of screen | | |
| Camera | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, HDMI port supporting HDCP to output protected content; <i>Max external resolution:</i> 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port) | | |
| Keyboard | 6-row, ThinkVantage button, spill-resistant, multimedia Fn keys | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch | | |
| Lighting FX | Illuminated power button | | Supports ThinkVantage® technologies |
| Dimensions ³ | <i>4/6-cell 14.0W" (WxDxH):</i> 13.54" x 9.17" x 1.26–1.42"; 344mm x 233mm x 32–36mm | | 65-watt (GMA graphics) AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Weight ² | <i>4-cell:</i> starting at 4.59 lb (2.08kg); <i>6-cell:</i> starting at 5.1 lb (2.3kg) | | |
| Case color | ThinkPad Matte Black | | |
| Case material | Scratch-resistant ABS plastic | | |
| Battery - type ³⁷ | Lithium Ion 6-cell | | |
| Battery - life ¹⁰ | <i>6-cell:</i> up to 4.0 hr; <i>9-cell:</i> up to 6 hr | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) | | |
| ExpressCard | One slot (ExpressCard/34) | | ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 |
| Multicard Reader | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) | | ThinkPlus 2-year LOR 9x5 NBD 45K5969 |
| PC Card | None | | ThinkPlus 3-year LOR 9x5 NBD 45K5970 |
| Smart Card Read | None | | ThinkPlus 4-year LOR 9x5 NBD 45K5973 |
| Ports | Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | ThinkPlus 5-year LOR 9x5 NBD 45K5975 |
| Mini PCI Express | One Mini PCI Express slot | | ThinkPlus 2-year P&L P/U Depot 45K5971 |
| Intel 5100 ²⁸ | 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | ThinkPlus 3-year P&L P/U Depot 45K5972 |
| WWAN upg | None | | ThinkPlus 4-year P&L P/U Depot 45K5974 |
| Modem | None | | ThinkPlus 5-year P&L P/U Depot 45K5976 |
| Bluetooth™ | <i>Some:</i> Bluetooth 2.1 wireless, LED indicator | | Post-warranty annual maintenance agreements at |
| Ethernet | Realtek RTL8111DL Gigabit Network Connection, PHY, PCIe x1 | | lenovo.com/thinkplus/warranty |
| Intel AMT | None | | |
| Audio support | High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security chip | None | | |
| Fingerprint reader | <i>Some:</i> Fingerprint reader on palm rest, swipe sensor | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information

* Intel Centrino® processor technology

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US models announced October 22, 2009

(JAD1-2) October 2009

US models withdrawn effective February 2010

ThinkPad® SL410 2842 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Screen type | Cam- era | Integrated graphics | Disk SATA GB ³ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Blue- tooth | Finger print reader | Bat- tery cells | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|----------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|----------------------|----------------|---------------------------|-----------------------|---------|---------------|
| 2842-F7U | T6570 | 2.10 | 2GB | 14.0" HD | LED | Glossy | 2.0M | GMA | 250G 5400 | DVD±RW | * Intel 1000 | None | | | 6 | Pro 32 | Jan 10 |
| 2842-F8U | T6570 | 2.10 | 3GB | 14.0" HD | LED | Glossy | 2.0M | GMA | 320G 7200 | DVD±RW | * Intel 1000 | None | | | 6 | Pro 32 | Jan 10 |
| 2842-F9U | T6670 | 2.20 | 4GB | 14.0" HD | LED | Glossy | 2.0M | GMA | 320G 7200 | DVD±RW | * Intel 1000 | None | Blue | Fing | 6 | Pro 64 | Jan 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | |
|---|---|--|--|
| Processor | Intel® Core™ 2 Duo processor T6570 or T6670 with dual-core, 800MHz system bus, and 2MB L2 cache | | Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Roxio® Creator® Business Edition (DVD±RW) Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Memory | 2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 250GB ⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display Camera | 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio 2.0-megapixel, fixed focus, on top of screen | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, HDMI port supporting HDCP to output protected content; <i>Max external resolution:</i> 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port) | | |
| Keyboard TrackPoint® Touch pad | 6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch | | |
| Lighting FX | Illuminated power button | | |
| Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰ | 4/6-cell 14.0W" (WxDxH): 13.54" x 9.17" x 1.26–1.42"; 344mm x 233mm x 32–36mm 4-cell: starting at 4.59 lb (2.08kg); 6-cell: starting at 5.1 lb (2.3kg) ThinkPad Matte Black Scratch-resistant ABS plastic Lithium Ion 6-cell 6-cell: up to 4.0 hr; 9-cell: up to 6 hr | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) One slot (ExpressCard/34) | | |
| ExpressCard Multicard Reader PC Card Smart Card Read Ports | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | |
| Mini PCI Express Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | One Mini PCI Express slot 11b/g/n wireless ⁴ , Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 None None <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Realtek RTL8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security Security chip Fingerprint reader | None <i>Some:</i> Fingerprint reader on palm rest, swipe sensor | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information
US models announced December 15, 2009

* Intel Centrino® processor technology

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(JAD1-3) December 2009

ThinkPad® SL410 2874 (GMA) - TopSeller (Celeron) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Celeron proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Screen type | Cam- era | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Bat- tery Blue- tooth cells | Preload | Avail date | |
|------------|---------------------------|------|--------|----------------------------|-------------------|----------------|-------------|------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|---|---------|---------------|--------|
| 2874-32U | Cel T3000 | 1.80 | 2GB | 14.0" HD | LED | Glossy | | GMA | 160G 5400 | DVD±RW | 11n ²⁸ | None | None | 6 | Home P | Oct 09 |
| 2874-7RU | Cel T3100 | 1.90 | 2GB | 14.0" HD | LED | Glossy | 2.0M | GMA | 250G 5400 | DVD±RW | Intel 1000 ²⁸ | None | None | 6 | Home P | Jan 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- A comprehensive computing solution for small and medium business
- Balanced between serious business computing and powerful multimedia features

| | | | |
|--|---|--|---|
| Processor | Intel® Celeron® Processor T3000 or T3100 with dual-core, 800MHz system bus, and 1MB L2 cache | | Preloaded operating system ²⁰ - Genuine Windows® 7 Home Premium 64 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage Power Manager• ThinkVantage System Update• ThinkVantage Toolbox• Lenovo Online Data Backup• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 160GB ⁸ (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display Camera | 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 2.0-megapixel, fixed focus, on top of screen | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500M (GMA 4500M) , in GL40, HDMI port supporting HDCP to output protected content; <i>Max external resolution:</i> 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port) | | Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty |
| Keyboard TrackPoint® Touch pad | 6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminated power button | | |
| Lighting FX | | | |
| Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰ | <i>4/6-cell 14.0W" (WxDxH):</i> 13.54" x 9.17" x 1.26–1.42"; 344mm x 233mm x 32–36mm <i>4-cell:</i> starting at 4.59 lb (2.08kg); <i>6-cell:</i> starting at 5.1 lb (2.3kg) ThinkPad Matte Black Scratch-resistant ABS plastic Lithium Ion 6-cell <i>6-cell:</i> up to 4.0 hr; <i>9-cell:</i> up to 6 hr | | |
| Chipset | Mobile Intel GL40 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) One slot (ExpressCard/34) | | |
| ExpressCard Multicard Reader PC Card Smart Card Read Ports | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | |
| Mini PCI Express 11n ²⁸ Intel 1000 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | One Mini PCI Express slot <i>Some:</i> 11b/g/n wireless ⁴ , Mini-PCIe Adapter II <i>Some:</i> 11b/g/n wireless, Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 None None None Realtek® RTL8103EL 10/100 Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security Security chip Fingerprint reader | None None None | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information

US model announced December 15, 2009; previous model on October 22, 2009

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(JAD1-1) December 2009

Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann 03/17/09 |
| 4GB PC3-8500 DDR3 SODIMM | 51J0493 | ann 03/03/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann 06/23/09 |

Storage and removable storage

| | | |
|---|---------|--------------|
| SL410/510 500GB 5400rpm Hard Drive | 43N3422 | ann 10/22/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-DVD Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable Burner | 43N3264 | ann 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | |
|---|---------|--------------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann 01/07/10 |

ThinkPad Expansion

| | | |
|--|---------|--------------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann 07/28/09 |

Keyboard

| | | |
|---|---------|--------------|
| TrackPoint Cap Collection | 73P2698 | ann 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Preferred Pro USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

Mouse

| | | |
|--|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann 01/22/08 |

Security

| | | |
|-------------------------------------|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

Multimedia

| | | |
|----------------------------|---------|--------------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|----------------------------|---------|--------------|

Modem

| | | |
|----------------------|---------|--------------|
| USB 2.0 Lenovo Modem | 43R1814 | ann 02/26/08 |
|----------------------|---------|--------------|

Batteries³⁷

| | | |
|---|---------|--------------|
| ThinkPad Battery 25 (4-cell) | 51J0498 | ann 10/22/09 |
| ThinkPad Battery 25+ (6-cell) | 51J0499 | ann 10/22/09 |
| ThinkPad Battery 25++ (9-cell) | 51J0500 | ann 10/22/09 |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann 09/20/05 |

⁴⁴ Requires the ThinkPad 90W AC Adapter

40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

| | | |
|--|---------|--------------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | |
| ⁴⁵ Only compatible with the integrated graphics models. | | |
| ThinkPad 90W AC Adapter | 40Y7659 | ann 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann 09/22/09 |

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

| | | |
|--------------------------------------|---------|--------------|
| • Palm device charge tip (L7) | 41R4315 | ann 12/18/07 |
| • Blackberry charge tip (L8a) | 41R4478 | ann 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann 01/06/09 |

More information at www.lenovopowertips.com**Carrying Cases**

Up to 14" widescreen models:

| | | |
|--------------------------|---------|--------------|
| ThinkPad 14W Case Sleeve | 57Y4294 | ann 03/16/10 |
|--------------------------|---------|--------------|

Up to 15.4" widescreen models:

| | | |
|---|---------|--------------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann 05/01/07 |
| Checkpoint Friendly Business Topload Case | 51J0418 | ann 05/05/09 |
| ThinkPad Business Topload Case | 43R2476 | ann 05/13/08 |
| ThinkPad Business Backpack | 43R2482 | ann 05/13/08 |
| ThinkPad Deluxe Expander Case | 43R2478 | ann 05/13/08 |
| ThinkPad Executive Leather Case | 43R2480 | ann 05/13/08 |

Up to 15.6" widescreen models:

| | | |
|------------------------------------|---------|--------------|
| Wenger Backpack for Lenovo | 57Y4271 | ann 01/07/10 |
| Wenger Slim Case for Lenovo | 57Y4272 | ann 01/07/10 |
| Wenger Deluxe Slim Case for Lenovo | 57Y4273 | ann 01/07/10 |

Lenovo luxury cases at www.lenovoluxurycases.com**Monitors**

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

Monitor Accessories⁴⁶

| | | |
|----------------------------------|---------|--------------|
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann 09/22/09 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad SL accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessoriesAccessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad SL510



Lenovo ThinkPad SL510



Lenovo ThinkPad SL510



Lenovo ThinkPad SL510



Lenovo Essential Notebook Stand
45J9292



ThinkPad SL510 Touchpad

ThinkPad® SL510 2847 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| | Type-model | Processor | GHz | Memory | Wide-screen display | CCFL or LED | Camera | Integrated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Blue-tooth | Finger-print reader | Battery cells | Preload | Avail date |
|------|------------|-----------|------|--------|---------------------|-------------|--------|---------------------|-------------------------------|--------------|----------------------------|--------------------|------------|---------------------|---------------|---------|------------|
| 2847 | 2847-2JU | T5870 | 2.00 | 2GB | 15.6" HD | LED | | GMA | 160G 5400 | DVD±RW | * Intel 5100 ²⁸ | | | | 6 | XP Pro | Oct 09 |
| | 2847-2MU | T5870 | 2.00 | 3GB | 15.6" HD | LED | 2.0M | GMA | 250G 5400 | DVD±RW | * Intel 5100 | | | | 6 | XP Pro | Oct 09 |
| | 2847-2NU | T5870 | 2.00 | 3GB | 15.6" HD | LED | 2.0M | GMA | 250G 5400 | DVD±RW | * Intel 5100 | AT&T ²³ | | | 6 | XP Pro | Oct 09 |
| | 2847-2PU | T6670 | 2.20 | 4GB | 15.6" HD | LED | 2.0M | GMA | 320G 5400 | DVD±RW | * Intel 5100 | | Blue | Fing | 6 | XP Pro | Oct 09 |
| 2847 | 2847-9WU | T6570 | 2.10 | 3GB | 15.6" HD | LED | 2.0M | GMA | 320G 7200 | DVD±RW | * Intel 1000 ²⁸ | | | | 6 | XP Pro | Jan 10 |
| | 2847-3ZU | T6570 | 2.10 | 2GB | 15.6" HD | LED | 2.0M | GMA | 250G 5400 | DVD±RW | * Intel 1000 | | | | 6 | XP Pro | Jan 10 |
| | 2847-QJU | T6670 | 2.20 | 4GB | 15.6" HD | LED | 2.0M | GMA | 320G 5400 | DVD±RW | * Intel 1000 | | Blue | Fing | 6 | XP Pro | Oct 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- A comprehensive computing solution for small and medium business
- Balanced between serious business computing and powerful multimedia features

| | | | |
|--------------------------------|---|--|---|
| Processor | Intel® Core™ 2 Duo processor T5870, T6570, or T6670 with dual-core, 800MHz system bus, and 2MB L2 cache | | Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage Power Manager• ThinkVantage System Update• Fingerprint Software (fingerprint models)• ThinkVantage Toolbox• Skype™ for Windows• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) |
| Memory | 2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 160GB ⁸ (5400 rpm), 250GB (5400 rpm), or 320GB (5400 or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | |
| Widescreen display | 15.6" (395mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 2.0-megapixel, fixed focus, on top of screen | | |
| Camera | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, HDMI port supporting HDCP to output protected content <i>Max external resolution:</i> 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port) | | |
| Keyboard | 6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass | | |
| Touch pad | UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch | | |
| Lighting FX | Illuminated power button | | |
| Dimensions ³ | 4/6-cell 15.6W" (WxDxH): 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm | | Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 |
| Weight ² | 4-cell: starting at 5.17 lb (2.35kg); 6-cell: starting at 5.64 lb (2.56kg) | | |
| Case color | ThinkPad Matte Black | | |
| Case material | Scratch-resistant ABS plastic | | |
| Battery - type ³⁷ | Lithium Ion 6-cell | | |
| Battery - life ¹⁰ | 6-cell: up to 4.0 hr; 9-cell: up to 6 hr | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) | | |
| ExpressCard | One slot (ExpressCard/34) | | |
| Multicard reader | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) | | |
| PC Card | None | | |
| Smart Card read | None | | |
| Ports | Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | |
| Mini PCI Express | One or two Mini PCI Express slots | | |
| Intel 1000 ²⁸ | <i>Some:</i> 11b/g/n wireless ⁴ , Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 | | |
| Intel 5100 ²⁸ | <i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) | | |
| AT&T ²³ | <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with <u>AT&T®</u> | | |
| Modem | None | | |
| Bluetooth™ | <i>Some:</i> Bluetooth 2.1 wireless, LED indicator | | |
| Ethernet | Realtek® RTL8111DL Gigabit Network Connection, PHY, PCIe x1 | | |
| Intel AMT | None | | |
| Audio support | High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | |
| Security chip | None | | |
| Fingerprint reader | <i>Some:</i> Fingerprint reader on palm rest, swipe sensor | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | |

See footnotes for important warranty information

* Intel Centrino® processor technology

US model announced October 22, 2009; previous models on October 22 or December 15, 2009

US models withdrawn effective February 2010

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(TOP1-2) April 2010

ThinkPad® SL510 2847 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Screen type | Cam- era | Inte- grated graphics | Disk SATA GB ⁸ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Blue- tooth | Finger print reader | Bat- tery cells | Preload | Avail date |
|------------|----------------|------|--------|----------------------------|-------------------|----------------|-------------|-----------------------------|-------------------------------------|-----------------|---------------------------------|-----------------------|----------------|---------------------------|-----------------------|---------|---------------|
| 2847-2KU | T5870 | 2.00 | 2GB | 15.6" HD | LED | | | GMA | 160G 5400 | DVD±RW * | Intel 5100 ²⁸ | | | | 6 | Pro 32 | Oct 09 |
| 2847-2LU | T5870 | 2.00 | 4GB | 15.6" HD | LED | | 2.0M | GMA | 250G 5400 | DVD±RW * | Intel 5100 | | Blue | | 6 | Home P | Oct 09 |
| 2847-2QU | P8700 | 2.53 | 4GB | 15.6" HD | LED | | 2.0M | GMA | 320G 5400 | DVD±RW * | Intel 5100 | | Blue | Fing | 6 | Pro 64 | Oct 09 |
| 2847-6GU | T6670 | 2.20 | 2GB | 15.6" HD | LED | | 2.0M | GMA | 250G 5400 | DVD±RW * | WiMAX | | | | 6 | Pro 32 | Nov 09 |
| 2847-6HU | T6670 | 2.20 | 3GB | 15.6" HD | LED | | 2.0M | GMA | 250G 5400 | DVD±RW * | Intel 5100 | Verizon ¹⁶ | | | 6 | Pro 32 | Nov 09 |
| 2847-9VU | T6570 | 2.10 | 4GB | 15.6" HD | LED | Glossy | 2.0M | GMA | 320G 7200 | DVD±RW * | Intel 1000 ²⁸ | | Blue | | 6 | Home P | Jan 10 |
| 2847-9YU | T6670 | 2.20 | 4GB | 15.6" HD | LED | | 2.0M | GMA | 320G 7200 | DVD±RW * | Intel 1000 | | Blue | Fing | 6 | Pro 64 | Jan 10 |
| 2847-9UU | T6570 | 2.10 | 2GB | 15.6" HD | LED | | 2.0M | GMA | 250G 5400 | DVD±RW * | Intel 1000 | | | | 6 | Pro 32 | Jan 10 |
| 2847-9XU | T6570 | 2.10 | 3GB | 15.6" HD | LED | | 2.0M | GMA | 320G 7200 | DVD±RW * | Intel 1000 | | | | 6 | Pro 32 | Jan 10 |
| 2847-9ZU | T6670 | 2.20 | 3GB | 15.6" HD | LED | | 2.0M | GMA | 320G 7200 | DVD±RW * | Intel 1000 | AT&T ²³ | | | 6 | Pro 32 | Jan 10 |
| 2847-AZU | T6570 | 2.10 | 2GB | 15.6" HD | LED | Glossy | 2.0M | GMA | 250G 5400 | DVD±RW * | Intel 1000 | | | | 6 | Home P | Apr 10 |

• These small and medium business (SMB) models are part of the US TopSeller™ Program

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Processor | Intel® Core™ 2 Duo processor T5870, T6570, or T6670 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Core 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache | | | | | | | | | | Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 32 - Some: Genuine Windows 7 Professional 64 | | | | | | |
| Memory | 2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | | | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 160GB ⁸ (5400 rpm), 250GB (5400 rpm), or 320GB (5400 or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | | | | | |
| Widescreen display | Some: 15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | | | | | | | |
| Camera | Some: 2.0-megapixel, fixed focus, on top of screen | | | | | | | | | | | | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, HDMI port supporting HDCP to output protected content Max external resolution: 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port) | | | | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad | 6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch | | | | | | | | | | | | | | | | |
| Lighting FX | Illuminated power button | | | | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case Battery - type ³⁷ Battery - life ¹⁰ | 4/6-cell 15.6W" (WxDxH): 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm 4-cell: starting at 5.17 lb (2.35kg); 6-cell: starting at 5.64 lb (2.56kg) Color: ThinkPad Matte Black; Material: Scratch-resistant ABS plastic Lithium Ion 6-cell 6-cell: up to 4.0 hr; 9-cell: up to 6 hr | | | | | | | | | | Supports ThinkVantage® technologies | | | | | | |
| Chipset | Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) One slot (ExpressCard/34) | | | | | | | | | | 65-watt (GMA graphics) AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | | | | |
| ExpressCard Multicard reader PC Card Smart Card read Ports | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | | | | | | | | | | | | | | | |
| Mini PCI Express Intel 1000 ²⁸ Intel 5100 ²⁸ WiMAX Verizon ¹⁶ AT&T ²³ | One or two Mini PCI Express slots Some: 11b/g/n wireless ⁴ , Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n and WiMAX wireless, Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak) Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon® Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T® | | | | | | | | | | ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | | | | | |
| Modem Bluetooth™ Ethernet Intel AMT Audio support | None Some: Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | None None Some: Fingerprint reader on palm rest, swipe sensor | | | | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

* Intel Centrino® processor technology

US models announced April 6, 2010;

✦ Intel Centrino 2 processor technology

previous models on October 22, November 17, or December 15, 2009

US models withdrawn effective February 2010

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(TOP1-3) April 2010

ThinkPad® SL510 2875 (GMA) - TopSeller (Celeron) - Windows 7

Personal Systems Reference (PSREF)

| Type-model | Celeron proc- essor | GHz | Memory | Wide- screen display | CCFL or LED | Screen type | Cam- era | Inte- grated graphics | Disk SATA GB ³ rpm | SATA optical | Mini PCIe 802.11 wireless | Mini PCIe WWAN | Blue/ Fing cells | Bat- tery Preload | Avail date |
|------------|---------------------------|------|--------|----------------------------|-------------------|----------------|-------------|-----------------------------|-------------------------------------|-----------------|---------------------------------|-------------------|------------------------|-------------------------|---------------|
| 2875-32U | Cel T3000 | 1.80 | 1GB | 15.6" HD | LED | Glossy | | GMA | 160G 5400 | DVD±RW | 11n ²⁸ | None | None | 6 Home P | Oct 09 |
| 2875-4YU | Cel T3100 | 1.90 | 2GB | 15.6" HD | LED | Glossy | 2.0M | GMA | 250G 5400 | DVD±RW | Intel 1000 ²⁸ | None | None | 6 Home P | Jan 10 |

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **A comprehensive computing solution for small and medium business**
- **Balanced between serious business computing and powerful multimedia features**

| | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|
| Processor | Intel® Celeron® Processor T3000 or T3100 with dual-core, 800MHz system bus, and 1MB L2 cache | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Home Premium 64 | | | | |
| Memory | 1GB or 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) | | | | |
| SATA DVD±RW SATA disk | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 160GB⁸ (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | | | | | |
| Widescreen display Camera | 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 2.0-megapixel, fixed focus, on top of screen | | | | | | | | | | | | | | |
| Integrated graphics | Intel Graphics Media Accelerator 4500M (GMA 4500M) , in GL40, HDMI port supporting HDCP to output protected content <i>Max external resolution: 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)</i> | | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad | 6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch | | | | | | | | | | | | | | |
| Lighting FX | Illuminated power button | | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰ | <i>4/6-cell 15.6W" (WxDxH):</i> 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm <i>4-cell:</i> starting at 5.17 lb (2.35kg); <i>6-cell:</i> starting at 5.64 lb (2.56kg) ThinkPad Matte Black Scratch-resistant ABS plastic Lithium Ion 6-cell <i>6-cell:</i> up to 4.0 hr; <i>9-cell:</i> up to 6 hr | | | | | | | | | | Supports ThinkVantage® technologies | | | | |
| Chipset | Mobile Intel GL40 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) One slot (ExpressCard/34) | | | | | | | | | | 65-watt (GMA graphics) AC adapter RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 | | | | |
| ExpressCard Multicard reader PC Card Smart Card read Ports | 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | | | | | | | | | ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 | | | | |
| Mini PCI Express 11n ²⁸ Intel 1000 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support | One Mini PCI Express slot <i>Some:</i> 11b/g/n wireless ⁴ , Mini-PCIe Adapter II <i>Some:</i> 11b/g/n wireless, Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 None None None Realtek® RTL8103EL 10/100 Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | None None None | | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty | | | | |

See footnotes for important warranty information

US model announced December 15, 2009; previous model on October 22, 2009

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(TOP1-1) December 2009

Memory

| | | | |
|--|---------|-----|----------|
| 1GB PC3-8500 DDR3 SODIMM | 43R1987 | ann | 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann | 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM | 43R1988 | ann | 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann | 03/17/09 |
| 4GB PC3-8500 DDR3 SODIMM | 51J0493 | ann | 03/03/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann | 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann | 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann | 06/23/09 |
| 4GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3708 | ann | 06/23/09 |

Storage and removable storage

| | | | |
|---|---------|-----|----------|
| SL410/510 500GB 5400rpm Hard Drive | 43N3422 | ann | 10/22/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann | 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann | 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann | 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann | 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann | 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann | 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann | 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann | 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann | 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann | 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann | 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann | 01/05/10 |

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

| | | | |
|---|---------|-----|----------|
| ThinkPad Gobi™ 2000 Broadband Option | 78Y1399 | ann | 01/07/10 |
| ThinkPad AT&T® Gobi 2000 Broadband Option | 78Y1398 | ann | 01/07/10 |

ThinkPad Expansion

| | | | |
|--|---------|-----|----------|
| Lenovo® Essential Notebook Stand | 45J9292 | ann | 05/12/09 |
| USB Port Replicator with Digital Video | 45K1610 | ann | 07/28/09 |

Keyboard

| | | | |
|---|---------|-----|----------|
| TrackPoint Cap Collection | 73P2698 | ann | 12/16/03 |
| USB Numeric Keypad | 33L3225 | ann | 05/01/00 |
| Preferred Pro USB Keyboard | 73P5220 | ann | 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann | 03/23/04 |
| Ultralim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann | 09/15/09 |
| ⁵² Wireless via 2.4GHz technology using a micro-size USB receiver. | | | |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann | 08/18/09 |
| Preferred Pro USB Fingerprint Keyboard | 73P4730 | ann | 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann | 03/24/09 |

Mouse

| | | | |
|--|---------|-----|----------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann | 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann | 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann | 05/21/03 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann | 01/23/07 |
| ThinkPad USB Laser Mouse | 57Y4635 | ann | 12/15/09 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann | 08/27/02 |
| ThinkPad Travel Mouse (USB, Optical) | 31P7410 | ann | 06/04/02 |
| ThinkPad Bluetooth Laser Mouse | 41U5008 | ann | 01/22/08 |

Security

| | | | |
|-------------------------------------|---------|-----|----------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann | 02/21/06 |

Multimedia

| | | | |
|----------------------------|---------|-----|----------|
| ThinkPad In-Ear Headphones | 57Y4488 | ann | 01/07/10 |
|----------------------------|---------|-----|----------|

Modem

| | | | |
|----------------------|---------|-----|----------|
| USB 2.0 Lenovo Modem | 43R1814 | ann | 02/26/08 |
|----------------------|---------|-----|----------|

Batteries³⁷

| | | | |
|---|---------|-----|----------|
| ThinkPad Battery 25 (4-cell) | 51J0498 | ann | 10/22/09 |
| ThinkPad Battery 25+ (6-cell) | 51J0499 | ann | 10/22/09 |
| ThinkPad Battery 25++ (9-cell) | 51J0500 | ann | 10/22/09 |
| ThinkPad External Battery Charger ⁴⁴ | 40Y7625 | ann | 09/20/05 |

⁴⁴ Requires the *ThinkPad 90W AC Adapter*

40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

| | | | |
|--|---------|-----|----------|
| ThinkPad 65W AC Adapter ⁴⁵ | 40Y7696 | | |
| ⁴⁵ Only compatible with the integrated graphics models. | | | |
| ThinkPad 90W AC Adapter | 40Y7659 | ann | 09/20/05 |
| 90W Ultralim AC/DC Combo Adapter | 41R4493 | ann | 09/22/09 |

More info at www.lenovo.com/support/poweradapters*Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493*

| | | | |
|--------------------------------------|---------|-----|----------|
| • Palm device charge tip (L7) | 41R4315 | ann | 12/18/07 |
| • Blackberry charge tip (L8a) | 41R4478 | ann | 12/18/07 |
| • iPod and iPhone Charge Tip (L10a) | 41R4481 | ann | 12/18/07 |
| • Generic Micro USB charge tip (L18) | 41R4490 | ann | 01/06/09 |

More information at www.lenovopowertips.com**Carrying Cases***Up to 15.4" widescreen models:*

| | | | |
|--------------------------------|---------|-----|----------|
| ThinkPad 15W Case Sleeve | 51J0477 | ann | 08/18/09 |
| Lenovo Business Messenger Case | 51J0475 | ann | 08/18/09 |
| Lenovo Messenger Max | 41U5253 | ann | 05/01/07 |
| Lenovo Performance Backpack | 41U5254 | ann | 05/01/07 |
| ThinkPad Business Backpack | 43R2482 | ann | 05/13/08 |

Monitors

| | | | |
|-------------------------------------|---------|-----|----------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann | 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann | 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann | 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann | 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann | 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann | 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann | 09/17/08 |

Monitor Accessories⁴⁶

| | | | |
|----------------------------------|---------|-----|----------|
| ThinkVision USB Soundbar | 40Y7616 | ann | 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann | 09/16/08 |
| Kensington MicroSaver Cable Lock | 73P2582 | ann | 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann | 09/30/08 |
| Lenovo Easy Reach Monitor Stand | 55Y9258 | ann | 09/22/09 |
| Radial Arm | 19K4464 | ann | 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad SL accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

¹ Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.

² **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.

³ **Thinness** may vary at certain points on the system.

⁴ **Wireless capability:** Requires compatible wireless-enabled options sold separately.

⁶ **Public network download modem speeds** are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

⁷ **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.

⁸ **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

¹⁰ **Battery:** These model numbers achieved the battery life based on MobileMark® 2007 during testing. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

¹² **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

¹³ **Internet access not included.**

¹⁴ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

¹⁶ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.

¹⁷ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

¹⁸ **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.

¹⁹ **EasyServ depot repair service:** In the United States call 1-800-426-7378. The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.

²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

²² **ThinkPlus Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.

²³ **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

²⁴ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. In the United States call 1-800-426-7378. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.

²⁷ **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

²⁸ **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

³⁰ **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

³² **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

³⁵ **Operating system:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/think/support and enter your machine type and model number for more information.

³⁷ **Battery:** The ThinkPad Edge and ThinkPad SL series do not support batteries that are not genuine Lenovo-made or authorized. These systems will continue to boot, but may not charge unauthorized batteries.

Warning: Lenovo has no responsibility for the performance or safety of unauthorized batteries, and provides no warranties for failures or damage arising out of their use.

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Visit www.lenovo.com/safecomputing periodically for the latest information on safe and effective computing.

Visit www.lenovo.com/psref for the latest version of Personal Systems Reference.

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Morrisville, NC 27560
U.S.A.

April 2010
slbook.pdf



Personal Systems Reference Lenovo® ThinkCentre TopSeller™ Desktops

April 2010 - Version 375

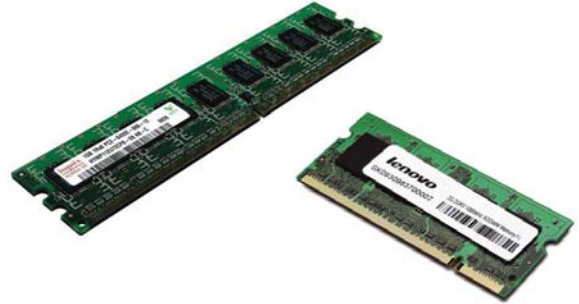


Lenovo ThinkCentre M90/M90p
(Eco Ultra Small, Small, Tower Form Factors)

Visit www.lenovo.com/psref for the latest version



Kensington® MicroSaver® Cable Lock
73P2582
Kensington Twin Head Cable Lock
45K1620



1GB PC2-6400 NP DDR2 UDIMM 41U2977
2GB PC2-6400 NP DDR2 UDIMM 41U2978
1GB PC3-8500 DDR3 UDIMM 45J5434
2GB PC3-8500 DDR3 UDIMM 45J5435
1GB PC3-8500 DDR3 SODIMM (notebook) 43R1987
2GB PC3-8500 DDR3 SODIMM (notebook) 43R1988
(UDIMM for SFF, Tower only; SODIMM for Eco USFF only)



ATI™ Radeon™ HD 3470 256MB (DP, VGA)
45K1636



Lenovo® USB-to-DVI Monitor Adapter
45K5296



Ultralim Wireless Keyboard and Mouse
57Y4700



Lenovo Laser Mouse (USB)
41U3074



Lenovo ThinkCentre M58e Small and
Lenovo ThinkCentre M58e Tower



Lenovo ThinkCentre M58e Small
with dual Lenovo ThinkVision monitors



Lenovo ThinkCentre M58e Small



Lenovo ThinkCentre M58e Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M58e Tower



Lenovo ThinkCentre M58e Tower
with Lenovo ThinkVision monitor

ThinkCentre® M58e Small (7259) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ^a | SATA disk | SATA optical | Graphics | Preload | Global Educ | Avail date |
|-------------|------------|------------|---------------|------|----------|-------|---------------------|--------------------|--------------|----------|---------|-------------|------------|
| M58e | 7259-B1U | 2x3 | Pentium E6300 | 2.80 | 2MB | 2 | 1GB | 250GB ² | DVD | GMA | XP Pro | None | Nov 09 |
| M58e | 7259-B2U | 2x3 | Pentium E6300 | 2.80 | 2MB | 2 | 2GB | 250GB | DVD±RW | GMA | XP Pro | None | Nov 09 |
| M58e | 7259-B3U | 2x3 | Pentium E6300 | 2.80 | 2MB | 2 | 3GB | 500GB | DVD±RW | GMA | XP Pro | None | Nov 09 |

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 1-year limited warranty¹**


| | | | | |
|--|---|---|---|--|
| Positioning Processor | Mainstream enterprise stability and manageability Intel® Pentium® Processor E6300 with dual-core , 1066MHz system bus, and 2MB L2 cache Processor in LGA775 socket | | Small <div><div>opticaldisk (in rear)</div></div> | |
| Implementation | Processor in LGA775 socket | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) | |
| Memory | 1GB, 2GB, or 3GB std , 4GB max ⁸ , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | Slot 1: Low Profile, PCI Express x16 (35w max) Slot 2: Low Profile, 32-bit PCI 2.3 <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 512MB [<i>1GB models</i>], 1GB [<i>2GB or 3GB models</i>]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | Security <ul style="list-style-type: none">• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, mouse, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement | |
| SATA disk | 250GB or 500GB , SATA 3.0Gb/s 7200 rpm, vibration dampening | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | |
| SATA DVD | <i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive | | | |
| SATA DVD±RW | <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors | | | |
| eSATA port | None | | | |
| Diskette drive | None | | | |
| Media reader | None | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | |
| Speaker | One internal speaker for business audio | | | |
| IEEE 1394 | None | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | |
| Intel AMT | None | | | |
| Modem | None | | | |
| Security chip | None | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | Supports ThinkVantage® technologies | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | |
| Power supply | 280 watts with variable speed fan, autosensing | | GREENGUARD® certified RoHS-compliant | |
| Preloaded operating system²⁰ | | Accessories | | |
| - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | |
| | | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | |
| | | 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | |
| | | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | |
| | | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | |
| | | DVD-ROM DL SATA 1.5Gb/s 16-48X Max | 41N5618 | |
| | | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | |
| | | DisplayPort™ to Single-link DVI-D Cable | 45J7915 | |
| | | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | |
| | | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | |
| | | NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | |
| | | NVIDIA Quadro 256MB NVS 290 | 43R1765 | |
| | | More accessories on O-M58E sheet | | |
| | | Acc Guide in pdf lenovo.com/accessoriesguide | | |
| | | Other accessories at lenovo.com/accessories | | |
| Preloaded applications⁵ (only some listed) | | | | |
| • Rescue and Recovery™ | | | | |
| • Client Security Solution™ | | | | |
| • ThinkVantage Productivity Center | | | | |
| • ThinkVantage System Update | | | | |
| • ThinkVantage Power Manager | | | | |
| • McAfee® VirusScan® Plus (30 days of virus definitions) | | | | |
| • Lenovo System Toolbox | | | | |
| • Adobe® Reader® | | | | |
| • Windows Live™ Toolbar | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | |
| • Corel® WinDVD® (DVD, DVD±RW) | | | | |
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ThinkCentre® M58e Small (7259) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ^a | SATA disk | SATA optical | Graphics | Win7 preload | Global Educ | Avail date |
|-------------|------------|------------|---------------|------|----------|-------|---------------------|--------------------|--------------|----------|--------------|-------------|------------|
| M58e | 7259-D3U | 2x3 | Celeron E3200 | 2.40 | 1MB | 2 | 1GB | 250GB ² | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7259-D2U | 2x3 | Pentium E5400 | 2.70 | 2MB | 2 | 2GB | 250GB | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7259-D1U | 2x3 | Pentium E5400 | 2.70 | 2MB | 2 | 3GB | 320GB | DVD±RW | GMA | Pro 32 | None | Jan 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹

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|---|---|--|---|--|--|-------------------------|---------|-------------------------|---------|------------------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|---|---------|--------------------------------------|---------|--------------------------------------|---------|---------------------------------|---------|-----------------------------|---------|----------------------------------|--|---|--|---|--|
| Positioning Processor | Mainstream enterprise stability and manageability Intel® Celeron® Processor E3200 with dual-core, 800MHz system bus, and 1MB L2 cache or Intel Pentium® Processor E5400 with dual-core, 800MHz system bus, and 2MB L2 cache | | Small | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | Processor in LGA775 socket | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std , 4GB max ^a , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | Slot 1: Low Profile, PCI Express x16 (35w max) Slot 2: Low Profile, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 253MB [1GB models], 765MB [2GB models], or 1277MB [3GB models]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm, vibration dampening | | | | Security <ul style="list-style-type: none">• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) - optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, mouse, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors on planar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Genuine Windows® 7 Professional 32 Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW) | | | Accessories <table><tr><td>1GB PC2-6400 DDR2 UDIMM</td><td>41U2977</td></tr><tr><td>2GB PC2-6400 DDR2 UDIMM</td><td>41U2978</td></tr><tr><td>250GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>41N3015</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort™ to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>ADD2 DVI-D Monitor Connection (HDCP)</td><td>43R1985</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® Quadro® 256MB FX 370 LP</td><td>55Y9275</td></tr><tr><td>NVIDIA Quadro 256MB NVS 290</td><td>43R1765</td></tr><tr><td colspan="2">More accessories on O-M58E sheet</td></tr><tr><td colspan="2">Acc Guide in pdf lenovo.com/accessoriesguide</td></tr><tr><td colspan="2">Other accessories at lenovo.com/accessories</td></tr></table> | | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort™ to Single-link DVI-D Cable | 45J7915 | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | NVIDIA Quadro 256MB NVS 290 | 43R1765 | More accessories on O-M58E sheet | | Acc Guide in pdf lenovo.com/accessoriesguide | | Other accessories at lenovo.com/accessories | |
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort™ to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro 256MB NVS 290 | 43R1765 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-M58E sheet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Limited Warranty¹ <ul style="list-style-type: none">➤ 1-year parts and labor➤ International Warranty Service⁹➤ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)➤ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9189)• 2-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9187)• 2-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9190)• 3-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9188)• 3-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9191)➤ ThinkPlus services at lenovo.com/thinkplus/warranty➤ Post warranty maintenance services available➤ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information
US models announced December 15, 2009

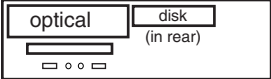
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(MIAM3-11) December 2009

ThinkCentre® M58e Small (7269) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Chassis intr switch | Preload | Global Educ | Avail date |
|------|------------|------------|-------------------|------|----------|-------|---------------------|--------------------|--------------|----------|---------------------|---------|-------------|------------|
| M58e | 7269-E5U | 2x3 | Pentium E5400 | 2.70 | 2MB | 2 | 1GB | 250GB ² | DVD | GMA | | XP Pro | None | Jan 10 |
| M58e | 7269-D5U | 2x3 | Pentium E6300 | 2.80 | 2MB | 2 | 1GB | 250GB | DVD | GMA | Switch | XP Pro | None | Nov 09 |
| M58e | 7269-D6U | 2x3 | Pentium E6300 | 2.80 | 2MB | 2 | 2GB | 250GB | DVD±RW | GMA | Switch | XP Pro | None | Nov 09 |
| M58e | 7269-D7U | 2x3 | Core 2 Duo E7500 | 2.93 | 3MB | 2 | 3GB | 320GB | DVD±RW | GMA | | XP Pro | None | Nov 09 |
| M58e | 7269-D8U | 2x3 | Core 2 Quad Q9400 | 2.66 | 6MB | 4 | 3GB | 500GB | DVD±RW | GMA | | XP Pro | None | Nov 09 |
| M58e | 7269-F1U | 2x3 | Core 2 Quad Q9500 | 2.83 | 6MB | 4 | 3GB | 500GB | DVD±RW | GMA | | XP Pro | None | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|---|-------------------------|---------|-------------------------|---------|------------------------------------|---------|------------------------------------|---------|----------------------------------|---------|------------------------------------|---------|---|---------|---|---------|--------------------------------------|---------|--------------------------------------|---------|---------------------------------|---------|-----------------------------|---------|----------------------------------|--|---|--|---|--|
| Positioning Processor | Mainstream enterprise stability and manageability Intel® Pentium® Processor E5400 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Pentium Processor E6300 with dual-core, 1066MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Quad Processor Q9400 or Q9500 with quad-core, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | Small  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std , 4GB max ⁸ , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | Slot 1: Low Profile, PCI Express x16 (35w max) Slot 2: Low Profile, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 512MB [1GB models], 1GB [2GB or 3GB models]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB, 320GB, or 500GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | Security <ul style="list-style-type: none">• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, mouse, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement• <i>Some:</i> Chassis intrusion switch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD | <i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional | | Accessories <table><tr><td>1GB PC2-6400 DDR2 UDIMM</td><td>41U2977</td></tr><tr><td>2GB PC2-6400 DDR2 UDIMM</td><td>41U2978</td></tr><tr><td>250GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>41N3015</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>DVD-ROM DL SATA 1.5Gb/s 16-48X Max</td><td>41N5618</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort™ to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>ADD2 DVI-D Monitor Connection (HDCP)</td><td>43R1985</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® Quadro® 256MB FX 370 LP</td><td>55Y9275</td></tr><tr><td>NVIDIA Quadro 256MB NVS 290</td><td>43R1765</td></tr><tr><td colspan="2">More accessories on O-M58E sheet</td></tr><tr><td colspan="2">Acc Guide in pdf lenovo.com/accessoriesguide</td></tr><tr><td colspan="2">Other accessories at lenovo.com/accessories</td></tr></table> | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | DVD-ROM DL SATA 1.5Gb/s 16-48X Max | 41N5618 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort™ to Single-link DVI-D Cable | 45J7915 | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | NVIDIA Quadro 256MB NVS 290 | 43R1765 | More accessories on O-M58E sheet | | Acc Guide in pdf lenovo.com/accessoriesguide | | Other accessories at lenovo.com/accessories | |
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DVD-ROM DL SATA 1.5Gb/s 16-48X Max | 41N5618 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort™ to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro 256MB NVS 290 | 43R1765 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-M58E sheet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• ThinkVantage Power Manager• McAfee® VirusScan® Plus (30 days of virus definitions)• Lenovo System Toolbox• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD, DVD±RW) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ThinkCentre® M58e Small (7269) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Win7 preload | Global Educ | Avail date |
|-------------|------------|------------|-------------------|------|----------|-------|---------------------|--------------------|--------------|----------|--------------|-------------|------------|
| M58e | 7269-E6U | 2x3 | Pentium E5400 | 2.70 | 2MB | 2 | 1GB | 250GB ² | DVD | GMA | Pro 32 | None | Jan 10 |
| M58e | 7269-E7U | 2x3 | Pentium E5400 | 2.70 | 2MB | 2 | 2GB | 250GB | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7269-E8U | 2x3 | Core 2 Duo E7500 | 2.93 | 3MB | 2 | 3GB | 320GB | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7269-E9U | 2x3 | Core 2 Quad Q9400 | 2.66 | 6MB | 4 | 3GB | 500GB | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7269-F2U | 2x3 | Core 2 Quad Q9500 | 2.83 | 6MB | 4 | 3GB | 500GB | DVD±RW | GMA | Pro 32 | None | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|-------------------------|---------|-------------------------|---------|------------------------------------|---------|------------------------------------|---------|----------------------------------|---------|------------------------------------|---------|---|---------|---|---------|--------------------------------------|---------|--------------------------------------|---------|---------------------------------|---------|-----------------------------|---------|----------------------------------|--|---|--|---|--|
| Positioning Processor | Mainstream enterprise stability and manageability Intel® Pentium® Processor E5400 with dual-core , 800MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core , 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Quad Processor Q9400 or Q9500 with quad-core , 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | | Small <div><div>opticaldisk (in rear)</div><div>□○□</div></div> <p>Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader)</p> <p>Slot 1: Low Profile, PCI Express x16 (35w max) Slot 2: Low Profile, 32-bit PCI 2.3</p> <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std, 4GB max⁸, PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 253MB [1GB models], 765MB [2GB models], or 1277MB [3GB models]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB, 320GB, or 500GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD | <i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors on planar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>Preloaded operating system²⁰<ul style="list-style-type: none">- Genuine Windows® 7 Professional 32Preloaded applications⁵ (only some listed)<ul style="list-style-type: none">• Rescue and Recovery™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)</div><div>Accessories<table><tr><td>1GB PC2-6400 DDR2 UDIMM</td><td>41U2977</td></tr><tr><td>2GB PC2-6400 DDR2 UDIMM</td><td>41U2978</td></tr><tr><td>250GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>41N3015</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>DVD-ROM DL SATA 1.5Gb/s 16-48X Max</td><td>41N5618</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort™ to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>ADD2 DVI-D Monitor Connection (HDCP)</td><td>43R1985</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® Quadro® 256MB FX 370 LP</td><td>55Y9275</td></tr><tr><td>NVIDIA Quadro 256MB NVS 290</td><td>43R1765</td></tr><tr><td colspan="2">More accessories on O-M58E sheet</td></tr><tr><td colspan="2">Acc Guide in pdf lenovo.com/accessoriesguide</td></tr><tr><td colspan="2">Other accessories at lenovo.com/accessories</td></tr></table></div><div></div></div></div> | | | | | | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | DVD-ROM DL SATA 1.5Gb/s 16-48X Max | 41N5618 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort™ to Single-link DVI-D Cable | 45J7915 | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | NVIDIA Quadro 256MB NVS 290 | 43R1765 | More accessories on O-M58E sheet | | Acc Guide in pdf lenovo.com/accessoriesguide | | Other accessories at lenovo.com/accessories | |
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DVD-ROM DL SATA 1.5Gb/s 16-48X Max | 41N5618 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort™ to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro 256MB NVS 290 | 43R1765 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-M58E sheet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div>Security<ul style="list-style-type: none">• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, mouse, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement</div><div>Supports ThinkVantage® technologies</div><div>GREENGUARD® certified RoHS-compliant</div><div>Limited Warranty¹<ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378</div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 12, 2010

US model withdrawn effective April 2010

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(MIAM3-15) March 2010

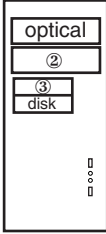
| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ^a | SATA disk | 2nd Disk Bay | SATA optical | Graphics | Preload | Global Educ | Avail date |
|-------------|------------|------------|---------------|------|----------|-------|---------------------|--------------------|--------------|--------------|----------|---------|-------------|------------|
| M58e | 7258-B1U | 4x4 | Pentium E6300 | 2.80 | 2MB | 2 | 1GB | 250GB ² | None | DVD | GMA | XP Pro | None | Nov 09 |
| M58e | 7258-B2U | 4x4 | Pentium E6300 | 2.80 | 2MB | 2 | 2GB | 250GB | None | DVD±RW | GMA | XP Pro | None | Nov 09 |
| M58e | 7258-B3U | 4x4 | Pentium E6300 | 2.80 | 2MB | 2 | 3GB | 500GB | None | DVD±RW | GMA | XP Pro | None | Nov 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹

| | | | | |
|--|---|--|--|---|
| Positioning Processor | Mainstream enterprise stability and manageability Intel® Pentium® Processor E6300 with dual-core , 1066MHz system bus, and 2MB L2 cache Processor in LGA775 socket | | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.3" D X 15.8" H• 175mm W X 440mm D X 402mm H• 24.7 lb (11.2 kg) in max configuration• Handle on top front• Toolless cover removal• Toolless disk, diskette drive, optical drive removal• Toolless adapter retention <div><div>optical</div><div>②</div><div>③</div><div>disk</div><div>Bay ①</div><div>Bay ②</div><div>Bay ③</div><div>Bay ④</div></div> |
| Implementation | | | | |
| Memory | 1GB, 2GB, or 3GB std , 4GB max ⁸ , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 512MB [<i>1GB models</i>], 1GB [<i>2GB or 3GB models</i>]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | | |
| SATA disk | 250GB or 500GB , SATA 3.0Gb/s 7200 rpm, vibration dampening | | | <div>Bay ① 5.25", 1.6" high, access, std optical</div> <div>Bay ② 5.25", 1.6" high, access, open</div> <div>Bay ③ 3.5", 1" high, access, open (reader/diskette)</div> <div>Bay ④ 3.5", 1" high, no access, std disk</div> <div>Slot 1: half-length,full-height, PCI Express x16 (75w max)</div> <div>Slot 2: half-length,full-height, PCI Express x1</div> <div>Slot 3: half-length,full-height, 32-bit PCI 2.3</div> <div>Slot 4: half-length,full-height, 32-bit PCI 2.3</div> |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | |
| SATA DVD | <i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive | | | |
| SATA DVD±RW | <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | |
| SATA cables | Two SATA cables (each 1-drop to device), four SATA connectors | | | |
| eSATA port | None | | | |
| Diskette drive | None | | | |
| Media reader | None | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | |
| Speaker | One internal speaker for business audio | | | |
| IEEE 1394 | None | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | |
| Intel AMT | None | | | |
| Modem | None | | | |
| Security chip | None | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | |
| Power supply | 280 watts with variable speed fan, manual switch | | | |
| Preloaded operating system²⁰ | | | | |
| - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional | | | | |
| Preloaded applications⁵ (only some listed) | | | | |
| • Rescue and Recovery™ | | | | |
| • Client Security Solution™ | | | | |
| • ThinkVantage Productivity Center | | | | |
| • ThinkVantage System Update | | | | |
| • ThinkVantage Power Manager | | | | |
| • McAfee® VirusScan® Plus (30 days of virus definitions) | | | | |
| • Lenovo System Toolbox | | | | |
| • Adobe® Reader® | | | | |
| • Windows Live™ Toolbar | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | |
| • Corel® WinDVD® (DVD, DVD±RW) | | | | |
| Accessories | | | | |
| 1GB PC2-6400 DDR2 UDIMM 41U2977 | | | | |
| 2GB PC2-6400 DDR2 UDIMM 41U2978 | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | | | | |
| DVD-ROM DL SATA 1.5Gb/s 16-48X Max 41N5618 | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive 41N5620 | | | | |
| Blu-ray™ Burner SATA 1.5Gb/s Drive 45K1675 | | | | |
| DisplayPort™ to Single-link DVI-D Cable 45J7915 | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) 43R1985 | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) 45K1636 | | | | |
| NVIDIA® GeForce® 9500GT 512MB (DP, DVI) 45K1635 | | | | |
| NVIDIA Quadro® 256MB NVS 290 43R1765 | | | | |
| More accessories on O-M58E sheet | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | |
| Other accessories at lenovo.com/accessories | | | | |
| Security | | | | |
| • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable) | | | | |
| • Power-on password | | | | |
| • Administrator password | | | | |
| • Hard disk password | | | | |
| • Boot sequence control | | | | |
| • Boot without keyboard, diskette | | | | |
| • Serial port I/O control | | | | |
| • Parallel port I/O control | | | | |
| • USB port disablement | | | | |
| Supports ThinkVantage® technologies | | | | |
| GREENGUARD® certified | | | | |
| RoHS-compliant | | | | |
| Limited Warranty¹ | | | | |
| ⇒ 1-year parts and labor | | | | |
| ⇒ International Warranty Service⁹ | | | | |
| ⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) | | | | |
| ⇒ Onsite service upgrade options (in eligible locations):⁷ | | | | |
| • 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9189) | | | | |
| • 2-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9187) | | | | |
| • 2-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9190) | | | | |
| • 3-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9188) | | | | |
| • 3-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9191) | | | | |
| ⇒ ThinkPlus services at lenovo.com/thinkplus/warranty | | | | |
| ⇒ Post warranty maintenance services available | | | | |
| ⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | |

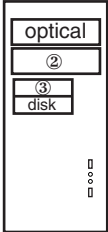
| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ⁸ | SATA disk | 2nd Disk Bay | SATA optical | Graphics | Win7 preload | Global Educ | Avail date |
|-------------|------------|------------|---------------|------|----------|-------|---------------------|--------------------|--------------|--------------|----------|--------------|-------------|------------|
| M58e | 7258-D3U | 4x4 | Celeron E3200 | 2.40 | 1MB | 2 | 1GB | 250GB ² | None | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7258-D2U | 4x4 | Pentium E5400 | 2.70 | 2MB | 2 | 2GB | 250GB | None | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7258-D1U | 4x4 | Pentium E5400 | 2.70 | 2MB | 2 | 3GB | 320GB | None | DVD±RW | GMA | Pro 32 | None | Jan 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|-------------------------|---|-------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|------------------------------------|---------|---|---------|--------------------------------------|---------|--------------------------------------|---------|---|---------|------------------------------|---------|----------------------------------|--|---|--|---|--|--|--|
| Positioning Processor | Mainstream enterprise stability and manageability Intel® Celeron® Processor E3200 with dual-core, 800MHz system bus, and 1MB L2 cache or Intel Pentium® Processor E5400 with dual-core, 800MHz system bus, and 2MB L2 cache Processor in LGA775 socket | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.3" D X 15.8" H• 175mm W X 440mm D X 402mm H• 24.7 lb (11.2 kg) in max configuration• Handle on top front• Toolless cover removal• Toolless disk, diskette drive, optical drive removal• Toolless adapter retention | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | Processor in LGA775 socket | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std. , 4GB max ⁸ , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 253MB [<i>1GB models</i>], 765MB [<i>2GB models</i>], or 1277MB [<i>3GB models</i>]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk Slot 1: half-length, full-height, PCI Express x16 (75w max) Slot 2: half-length, full-height, PCI Express x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm, vibration dampening | | Security <ul style="list-style-type: none">• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), four SATA connectors on planar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | GREENGUARD® certified RoHS-compliant | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 1-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9189)• 2-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9187)• 2-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9190)• 3-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9188)• 3-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9191)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, manual switch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Genuine Windows® 7 Professional 32 | | Accessories <table><tr><td>1GB PC2-6400 DDR2 UDIMM</td><td>41U2977</td></tr><tr><td>2GB PC2-6400 DDR2 UDIMM</td><td>41U2978</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>Blu-ray™ Burner SATA 1.5Gb/s Drive</td><td>45K1675</td></tr><tr><td>DisplayPort™ to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>ADD2 DVI-D Monitor Connection (HDCP)</td><td>43R1985</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® GeForce® 9500GT 512MB (DP, DVI)</td><td>45K1635</td></tr><tr><td>NVIDIA Quadro® 256MB NVS 290</td><td>43R1765</td></tr><tr><td colspan="2">More accessories on O-M58E sheet</td></tr><tr><td colspan="2">Acc Guide in pdf lenovo.com/accessoriesguide</td></tr><tr><td colspan="2">Other accessories at lenovo.com/accessories</td></tr></table> | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | DisplayPort™ to Single-link DVI-D Cable | 45J7915 | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® GeForce® 9500GT 512MB (DP, DVI) | 45K1635 | NVIDIA Quadro® 256MB NVS 290 | 43R1765 | More accessories on O-M58E sheet | | Acc Guide in pdf lenovo.com/accessoriesguide | | Other accessories at lenovo.com/accessories | | | |
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort™ to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® GeForce® 9500GT 512MB (DP, DVI) | 45K1635 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro® 256MB NVS 290 | 43R1765 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-M58E sheet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ThinkCentre® M58e Tower (7268) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ⁸ | SATA disk | 2nd Disk Bay | SATA optical | Graphics | Chassis intr switch | Preload | Global Educ | Avail date |
|---|---|------------|-------------------|---|----------|-------|---------------------|--------------------|--------------|---|----------|---------------------|---------|-------------|------------|
| M58e | 7268-D2U | 4x4 | Pentium E5400 | 2.70 | 2MB | 2 | 1GB | 250GB ² | None | DVD | GMA | | XP Pro | None | Jan 10 |
| M58e | 7268-D1U | 4x4 | Pentium E5400 | 2.70 | 2MB | 2 | 2GB | 250GB | None | DVD±RW | GMA | | XP Pro | None | Jan 10 |
| M58e | 7268-C3U | 4x4 | Pentium E6300 | 2.80 | 2MB | 2 | 1GB | 250GB | None | DVD | GMA | Switch | XP Pro | None | Nov 09 |
| M58e | 7268-C4U | 4x4 | Pentium E6300 | 2.80 | 2MB | 2 | 2GB | 250GB | None | DVD±RW | GMA | Switch | XP Pro | None | Nov 09 |
| M58e | 7268-C5U | 4x4 | Core 2 Duo E7500 | 2.93 | 3MB | 2 | 3GB | 320GB | None | DVD±RW | GMA | | XP Pro | None | Nov 09 |
| M58e | 7268-C6U | 4x4 | Core 2 Quad Q9400 | 2.66 | 6MB | 4 | 3GB | 500GB | None | DVD±RW | GMA | | XP Pro | None | Nov 09 |
| M58e | 7268-E1U | 4x4 | Core 2 Quad Q9500 | 2.83 | 6MB | 4 | 3GB | 500GB | None | DVD±RW | GMA | | XP Pro | None | Mar 10 |
| <ul style="list-style-type: none">• These small and medium business (SMB) models are part of the US TopSeller™ Program• These models have a 3-year limited warranty¹ | | | | | | | | | | | | | | | |
| Positioning | Mainstream enterprise stability and manageability | | | | | | | | | Tower | | | | | |
| Processor | Intel® Pentium® Processor E5400 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Pentium Processor E6300 with dual-core, 1066MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Quad Processor Q9400 or Q9500 with quad-core, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | | | | | | | | <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.3" D X 15.8" H• 175mm W X 440mm D X 402mm H• 24.7 lb (11.2 kg) in max configuration• Handle on top front• Toolless cover removal• Toolless disk, diskette drive, optical drive removal• Toolless adapter retention  | | | | | |
| Implementation | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std, 4GB max ⁸ , PC2-6400 800MHz DDR2, non-parity, dual-channel capable, two 240-pin DIMM sockets; Italics: standard memory in both sockets; no sockets avail; Non-Italics: standard memory in one socket; one socket available | | | | | | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500), integrated graphics in G41, uses main memory (up to 512MB [1GB models], 1GB [2GB or 3GB models]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | | | | | | | | Slot 1: half-length, full-height, PCI Express x16 (75w max) Slot 2: half-length, full-height, PCI Express x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3 | | | | | |
| SATA disk | 250GB, 320GB, or 500GB, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | | | | | | | Security <ul style="list-style-type: none">• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® Microsaver® cable)• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement• Some: Chassis intrusion switch | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | |
| SATA DVD | Some: DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive | | | | | | | | | | | | | | |
| SATA DVD±RW | Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), four SATA connectors on planar | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, manual switch | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ | | | | Accessories | | | | | | | | | | | |
| - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional | | | | 1GB PC2-6400 DDR2 UDIMM 41U2977 | | | | | | | | | | | |
| | | | | 2GB PC2-6400 DDR2 UDIMM 41U2978 | | | | | | | | | | | |
| | | | | 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | | | | | | | | | | | |
| | | | | 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) | | | | DVD-ROM DL SATA 1.5Gb/s 16-48X Max 41N5618 | | | | | | | | | | | |
| • Rescue and Recovery™ | | | | Super Multi-Burner DL DVD±RW SATA Drive 41N5620 | | | | | | | | | | | |
| • Client Security Solution™ | | | | Blu-ray™ Burner SATA 1.5Gb/s Drive 45K1675 | | | | | | | | | | | |
| • ThinkVantage Productivity Center | | | | DisplayPort™ to Single-link DVI-D Cable 45J7915 | | | | | | | | | | | |
| • ThinkVantage System Update | | | | ADD2 DVI-D Monitor Connection (HDCP) 43R1985 | | | | | | | | | | | |
| • ThinkVantage Power Manager | | | | ATI™ Radeon™ HD 3470 256MB (DP, VGA) 45K1636 | | | | | | | | | | | |
| • McAfee® VirusScan® Plus (30 days of virus definitions) | | | | NVIDIA® GeForce® 9500GT 512MB (DP, DVI) 45K1635 | | | | | | | | | | | |
| • Lenovo System Toolbox | | | | NVIDIA Quadro® 256MB NVS 290 43R1765 | | | | | | | | | | | |
| • Adobe® Reader® | | | | More accessories on O-M58E sheet | | | | | | | | | | | |
| • Windows Live™ Toolbar | | | | Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | Other accessories at lenovo.com/accessories | | | | | | | | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | | | | | | | | | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | | | | | | | | | | | | |
| • Corel® WinDVD® (DVD, DVD±RW) | | | | | | | | | | | | | | | |
| Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | |

See footnotes for important warranty information

¹⁴ US model announced March 2, 2010; previous models on November 3 or December 15, 2009

²⁰ US models withdrawn effective January or April 2010

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ThinkCentre® M58e Tower (7268) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ⁸ | SATA disk | 2nd Disk Bay | SATA optical | Graphics | Win7 preload | Global Educ | Avail date |
|-------------|------------|------------|-------------------|------|----------|-------|---------------------|--------------------|--------------|--------------|----------|--------------|-------------|------------|
| M58e | 7268-D3U | 4x4 | Pentium E5400 | 2.70 | 2MB | 2 | 1GB | 250GB ² | None | DVD | GMA | Pro 32 | None | Jan 10 |
| M58e | 7268-D4U | 4x4 | Pentium E5400 | 2.70 | 2MB | 2 | 2GB | 250GB | None | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7268-D5U | 4x4 | Core 2 Duo E7500 | 2.93 | 3MB | 2 | 3GB | 320GB | None | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7268-D6U | 4x4 | Core 2 Quad Q9400 | 2.66 | 6MB | 4 | 3GB | 500GB | None | DVD±RW | GMA | Pro 32 | None | Jan 10 |
| M58e | 7268-E2U | 4x4 | Core 2 Quad Q9500 | 2.83 | 6MB | 4 | 3GB | 500GB | None | DVD±RW | GMA | Pro 32 | None | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|---------|-------------------------|---------|------------------------------------|---------|----------------------------------|---------|------------------------------------|---------|---|---------|------------------------------------|---------|---|---------|--------------------------------------|---------|--------------------------------------|---------|---|---------|------------------------------|---------|----------------------------------|--|---|--|---|--|
| Positioning Processor | Mainstream enterprise stability and manageability Intel® Pentium® Processor E5400 with dual-core , 800MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core , 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Quad Processor Q9400 or Q9500 with quad-core , 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.3" D X 15.8" H• 175mm W X 440mm D X 402mm H• 24.7 lb (11.2 kg) in max configuration• Handle on top front• Toolless cover removal• Toolless disk, diskette drive, optical drive removal• Toolless adapter retention <div><div>optical</div><div>②</div><div>③</div><div>disk</div><div>Bay 1</div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std , 4GB max ⁸ , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | | Slot 1: half-length,full-height, PCI Express x16 (75w max) Slot 2: half-length,full-height, PCI Express x1 Slot 3: half-length,full-height, 32-bit PCI 2.3 Slot 4: half-length,full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 253MB [1GB models], 765MB [2GB models], or 1277MB [3GB models]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB, 320GB, or 500GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | <div>Security<ul style="list-style-type: none">• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® Microsaver® cable)• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement</div> <div>Supports ThinkVantage® technologies</div> <div>GREENGUARD® certified RoHS-compliant</div> <div>Limited Warranty¹<ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service®⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378</div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD | <i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), four SATA connectors on planar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, manual switch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div>Preloaded operating system²⁰<ul style="list-style-type: none">- Genuine Windows® 7 Professional 32</div><div>Accessories<table><tr><td>1GB PC2-6400 DDR2 UDIMM</td><td>41U2977</td></tr><tr><td>2GB PC2-6400 DDR2 UDIMM</td><td>41U2978</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>DVD-ROM DL SATA 1.5Gb/s 16-48X Max</td><td>41N5618</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>Blu-ray™ Burner SATA 1.5Gb/s Drive</td><td>45K1675</td></tr><tr><td>DisplayPort™ to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>ADD2 DVI-D Monitor Connection (HDCP)</td><td>43R1985</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® GeForce® 9500GT 512MB (DP, DVI)</td><td>45K1635</td></tr><tr><td>NVIDIA Quadro® 256MB NVS 290</td><td>43R1765</td></tr><tr><td colspan="2">More accessories on O-M58E sheet</td></tr><tr><td colspan="2">Acc Guide in pdf lenovo.com/accessoriesguide</td></tr><tr><td colspan="2">Other accessories at lenovo.com/accessories</td></tr></table></div></div> | | | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | DVD-ROM DL SATA 1.5Gb/s 16-48X Max | 41N5618 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | DisplayPort™ to Single-link DVI-D Cable | 45J7915 | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® GeForce® 9500GT 512MB (DP, DVI) | 45K1635 | NVIDIA Quadro® 256MB NVS 290 | 43R1765 | More accessories on O-M58E sheet | | Acc Guide in pdf lenovo.com/accessoriesguide | | Other accessories at lenovo.com/accessories | |
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DVD-ROM DL SATA 1.5Gb/s 16-48X Max | 41N5618 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort™ to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® GeForce® 9500GT 512MB (DP, DVI) | 45K1635 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro® 256MB NVS 290 | 43R1765 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-M58E sheet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 12, 2010

US model withdrawn effective April 2010

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(MIAM3-16) March 2010

Partial list of accessories supported on ThinkCentre M58e

Memory

| | | |
|-----------------------------------|---------|--------------|
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | ann 09/26/06 |
| 1GB PC2-6400 DDR2 UDIMM (25-Pack) | 51J0549 | ann 03/17/09 |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | ann 01/08/08 |
| 2GB PC2-6400 DDR2 UDIMM (25-Pack) | 51J0550 | ann 03/17/09 |

Optical

All:

| | | |
|--|---------|--------------|
| DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴ | 41N5618 | ann 09/26/06 |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | ann 09/26/06 |

Tower 7268/7270/7298/7491/7307/7508/7847/7843/7258 support:

| | | |
|------------------------------------|---------|--------------|
| Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | ann 03/31/09 |
|------------------------------------|---------|--------------|

Storage and removable storage

| | | |
|------------------------------------|---------|--------------|
| 160GB SATA 3.0Gb/s Disk (7200 rpm) | 09N4254 | ann 05/19/03 |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | ann 01/24/06 |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | ann 11/06/07 |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | ann 08/19/08 |

| | | |
|---|---------|--------------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Graphics

Small 7269/7279/7303/7506/7408/7514/7259 support Low Profile 35 watts max:

| | | |
|---|---------|--------------|
| DisplayPort™ to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ann 11/06/07 |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | ann 11/18/08 |
| NVIDIA® Quadro® 256MB NVS 290 | 43R1765 | ann 12/18/07 |
| NVIDIA Quadro 256MB FX 370 Low-Profile | 55Y9275 | ann 07/28/09 |
| NVIDIA GeForce® 310 DMS59(2-DVI, 2-VGA) | 57Y4167 | ann 03/02/10 |

Tower 7268/7270/7298/7491/7307/7508/7847/7843/7258 support 75 watts max:

| | | |
|--|---------|--------------|
| DisplayPort to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ann 11/06/07 |
| ATI Radeon HD 3470 256MB (DP, VGA) | 45K1636 | ann 11/18/08 |
| NVIDIA Quadro 256MB NVS 290 | 43R1765 | ann 12/18/07 |
| NVIDIA GeForce 9500GT 512MB (DP, DVI) | 45K1635 | ann 11/18/08 |
| NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA) | 57Y4167 | ann 03/02/10 |

⁵⁰ Attaches to the ThinkCentre compatible DisplayPort graphics card.More information at www.lenovo.com/support/graphiccards**Keyboard**

| | | |
|---|---------|--------------|
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Preferred Pro Full Size PS/2 Keyboard | 31P7415 | ann 06/04/02 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultraslim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.More information at www.lenovo.com/support/keyboards**Mouse**

| | | |
|---|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann 11/25/08 |

More information at www.lenovo.com/support/mice**Multimedia**

| | | |
|-----------------------------|---------|--------------|
| ThinkPad® In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|-----------------------------|---------|--------------|

Security

| | | |
|--|---------|--------------|
| Kensington® MicroSaver® Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.**Monitors**

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

More information at www.lenovo.com/thinkvision**Monitor Accessories⁴⁶**

| | | |
|--|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories**Medialess License Key (MLK)**

| | | |
|---|---------|--------------|
| Microsoft® Office 2007 Basic, English | 43R1528 | ann 07/03/07 |
| Microsoft Office 2007 Small Business, Engl | 43R1534 | ann 07/03/07 |
| Microsoft Office 2007 Professional, English | 43R1531 | ann 07/03/07 |

For more information on desktop accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessoriesAccessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo ThinkCentre M58 Eco Ultra Small



Lenovo ThinkCentre M58 Eco Ultra Small
with dual Lenovo ThinkVision monitors



Lenovo ThinkCentre M58 Small



Lenovo ThinkCentre M58 Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M58 Tower



Lenovo ThinkCentre M58 Tower
with dual Lenovo ThinkVision monitors

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ^a | SATA disk | SATA optical | Graphics | Monitor conn | DisplayPort dongle | ENERGY STAR 5.0 | Intel vPro | Global Preload Educ | Avail date |
|------------|------------|------------|------------------|------|-------|---------------------|--------------------|--------------|----------|--------------|--------------------|-----------------|------------|---------------------|------------|
| M58 | 8820-ANU | 1x2 | Core 2 Duo E7500 | 2.93 | 2 | 2GB | 250GB ^b | DVD±RW | GMA | VGA, DP | None | ES50 | None | XP Pro | Nov 09 |

- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This model has a 3-year limited warranty¹**

| | | | | | |
|--|---|---|---|---|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache Processor in LGA775 socket | | Eco Ultra Small | | <div><div>optical</div><div>disk</div></div> |
| Implementation | Processor in LGA775 socket | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk | | |
| Memory | 2GB std , 4GB max ^a , PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SODIMM sockets (notebook); <i>Non-italics</i> : standard memory in one socket; one socket available | | Slot 1: Low Profile, 32-bit PCI 2.3 | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500) , integrated graphics in Q45, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | <ul style="list-style-type: none">• Business black color; metal case• 10.8" W X 9.4" D X 3.1" H• 275mm W X 238mm D X 80mm H• 9.2 lb (4.2 kg) in maximum configuration• Hinged toolless cover for easy serviceability• Toolless disk and optical drive removal• Toolless systemboard retention• System floor stand for vertical orientation | | |
| SATA disk | 250GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors and one eSATA connector on planar | | | | |
| eSATA port | None | | | | |
| Diskette drive | None | | | | |
| Media reader | None | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- security slot and cover release button are combined into one latch for improved chassis security• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Individual USB port disablement |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | |
| Rear ports | Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | |
| Speaker | One internal speaker for business audio | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | | | |
| Intel AMT | None | | | | |
| Modem | None | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | Supports ThinkVantage® technologies |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | |
| Power supply | External AC/DC adapter, 130 watts, autosensing, 87% PSU | | | | EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant |
| Preloaded operating system²⁰ | | Accessories | | Limited Warranty¹ | |
| - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional | | 1GB PC3-8500 DDR3 SODIMM (notebook) 43R1987 | | ⇒ 3-year parts and labor | |
| | | 2GB PC3-8500 DDR3 SODIMM (notebook) 43R1988 | | ⇒ International Warranty Service⁹ | |
| | | 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | | ⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) | |
| | | 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | | ⇒ Onsite service upgrade options (in eligible locations):⁷ | |
| | | Super Multi-Burner DL DVD±RW SATA Drive 41N5620 | | • 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192) | |
| | | DisplayPort to Single-link DVI-D Cable 45J7915 | | • 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193) | |
| | | DisplayPort to VGA Monitor Cable 57Y4393 | | • 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194) | |
| | | Lenovo Vertical PC and Monitor Stand II 41R4474 | | • 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195) | |
| | | ThinkCentre Ultra Small Under Desk Mount 40Y8625 | | • 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196) | |
| | | More accessories on O-M58 sheet | | ⇒ ThinkPlus services at lenovo.com/thinkplus/warranty | |
| | | Acc Guide in pdf lenovo.com/accessoriesguide | | ⇒ Post warranty maintenance services available | |
| | | Other accessories at lenovo.com/accessories | | ⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | |
| Preloaded applications⁵ (only some listed) | | | | | |
| • Rescue and Recovery™ | | | | | |
| • Client Security Solution™ | | | | | |
| • ThinkVantage Productivity Center | | | | | |
| • ThinkVantage System Update | | | | | |
| • McAfee® VirusScan® Plus (30 days of virus definitions) | | | | | |
| • Lenovo System Toolbox | | | | | |
| • Adobe® Reader® | | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | | |
| • Corel® WinDVD® (DVD±RW) | | | | | |

ThinkCentre® M58 Eco Ultra Small (8820) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ^a | SATA disk | SATA optical | Graphics | Monitor conn | DisplayPort dongle | ENERGY STAR 5.0 | Intel vPro | Win7 preload | Global Educ | Avail date |
|------------|------------|------------|------------------|------|-------|---------------------|--------------------|--------------|----------|--------------|--------------------|-----------------|------------|--------------|-------------|------------|
| M58 | 8820-AQU | 1x2 | Core 2 Duo E7500 | 2.93 | 2 | 2GB | 250GB ^b | DVD±RW | GMA | VGA, DP | None | ES50 | None | Pro 32 | None | Jan 10 |

- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This model has a 3-year limited warranty¹**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|---|--|--|-------------------------------------|---------|-------------------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|---|---------|--|---------|---------------------------------|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ 2 Duo Processor E7500 with dual-core , 1066MHz system bus, and 3MB L2 cache Processor in LGA775 socket | | Eco Ultra Small <div><div>optical</div><div>disk</div></div> | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | Processor in LGA775 socket | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 2GB std , 4GB max ^a , PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SODIMM sockets (notebook); <i>Non-italics</i> : standard memory in one socket; one socket available | | Slot 1: Low Profile, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500) , integrated graphics in Q45, uses main memory (up to 765MB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | <ul style="list-style-type: none">• Business black color; metal case• 10.8" W X 9.4" D X 3.1" H• 275mm W X 238mm D X 80mm H• 9.2 lb (4.2 kg) in maximum configuration• Hinged toolless cover for easy serviceability• Toolless disk and optical drive removal• Toolless systemboard retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- security slot and cover release button are combined into one latch for improved chassis security• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Individual USB port disablement | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors and one eSATA connector on planar | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | External AC/DC adapter, 130 watts, autosensing, 87% PSU | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Genuine Windows® 7 Professional 32 | | | Accessories <table><tr><td>1GB PC3-8500 DDR3 SODIMM (notebook)</td><td>43R1987</td></tr><tr><td>2GB PC3-8500 DDR3 SODIMM (notebook)</td><td>43R1988</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>Lenovo Vertical PC and Monitor Stand II</td><td>41R4474</td></tr><tr><td>ThinkCentre Ultra Small Under Desk Mount</td><td>40Y8625</td></tr><tr><td colspan="2">More accessories on O-M58 sheet</td></tr></table> | | | 1GB PC3-8500 DDR3 SODIMM (notebook) | 43R1987 | 2GB PC3-8500 DDR3 SODIMM (notebook) | 43R1988 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | Lenovo Vertical PC and Monitor Stand II | 41R4474 | ThinkCentre Ultra Small Under Desk Mount | 40Y8625 | More accessories on O-M58 sheet | |
| 1GB PC3-8500 DDR3 SODIMM (notebook) | 43R1987 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC3-8500 DDR3 SODIMM (notebook) | 43R1988 | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | | | | | |
| Lenovo Vertical PC and Monitor Stand II | 41R4474 | | | | | | | | | | | | | | | | | | | | | | | | |
| ThinkCentre Ultra Small Under Desk Mount | 40Y8625 | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-M58 sheet | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW) | | | Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information
US model announced January 12, 2010

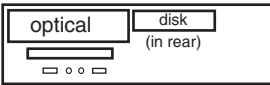
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(MLAN4-23) January 2010

ThinkCentre® M58 Small (8910) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHzCores | Memory ^a | SATA disk | SATA optical | Graphics | Monitor conn | DisplayPort dongle | Chassis intr switch | Intel vPro | Preload | Global Educ | Avail date |
|------------|------------|------------|-------------------|----------|---------------------|-----------|---------------------------|----------|--------------|--------------------|---------------------|------------|---------|-------------|------------|
| M58 | 8910-APU | 2x3 | Pentium E5400 | 2.70 | 2 | 2GB | 250GB ² DVD±RW | GMA | VGA, DP | None | | No | XP Pro | No | Jan 10 |
| M58 | 8910-ALU | 2x3 | Pentium E6300 | 2.80 | 2 | 2GB | 250GB DVD±RW | GMA | VGA, DP | None | Switch | No | XP Pro | No | Nov 09 |
| M58 | 8910-AMU | 2x3 | Core 2 Duo E7500 | 2.93 | 2 | 2GB | 250GB DVD±RW | GMA | VGA, DP | None | | No | XP Pro | No | Nov 09 |
| M58 | 8910-ATU | 2x3 | Core 2 Quad Q9500 | 2.83 | 4 | 4GB | 320GB DVD±RW | GMA | VGA, DP | None | | No | XP Pro | No | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|-------------------------|---------|-------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|--------------------------------------|---------|-------------------------------|---------|-------------------------------|---------|---------------------------------|--|---|--|---|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Pentium® Processor E5400 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Pentium Processor E6300 with dual-core, 1066MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Quad Processor Q9500 with quad-core, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | | Small  | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) Slot 1: Low Profile, PCI Express 2.0 x16 Slot 2: Low Profile, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 2GB or 4GB std, 8GB max ⁸ , PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; 3 sockets available | | | <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500) , integrated graphics in Q45, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) - optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Serial port I/O control• Individual USB port disablement• <i>Some:</i> Chassis intrusion switch | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors on planar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | One external SATA (eSATA) port | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort), eSATA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing, two diagnostic LEDs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• McAfee® VirusScan® Plus (30 days of virus definitions)• Lenovo System Toolbox• Adobe® Reader®• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) | | | Accessories <table><tr><td>1GB PC3-8500 DDR3 UDIMM</td><td>45J5434</td></tr><tr><td>2GB PC3-8500 DDR3 UDIMM</td><td>45J5435</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® Quadro® 256MB NVS 290</td><td>43R1765</td></tr><tr><td>NVIDIA Quadro 256MB FX 370 LP</td><td>55Y9275</td></tr><tr><td colspan="2">More accessories on O-M58 sheet</td></tr><tr><td colspan="2">Acc Guide in pdf lenovo.com/accessoriesguide</td></tr><tr><td colspan="2">Other accessories at lenovo.com/accessories</td></tr></table> | | | 1GB PC3-8500 DDR3 UDIMM | 45J5434 | 2GB PC3-8500 DDR3 UDIMM | 45J5435 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® Quadro® 256MB NVS 290 | 43R1765 | NVIDIA Quadro 256MB FX 370 LP | 55Y9275 | More accessories on O-M58 sheet | | Acc Guide in pdf lenovo.com/accessoriesguide | | Other accessories at lenovo.com/accessories | |
| 1GB PC3-8500 DDR3 UDIMM | 45J5434 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC3-8500 DDR3 UDIMM | 45J5435 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® Quadro® 256MB NVS 290 | 43R1765 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro 256MB FX 370 LP | 55Y9275 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-M58 sheet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

Ⓜ US model announced February 23, 2010; previous models on November 3 or December 15, 2009

Ⓜ US model withdrawn effective January 2010

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(MLAN4-11) March 2010

ThinkCentre® M58 Small (8910) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Monitor conn | DisplayPort dongle | Intel vPro | Win7 preload | Global Educ | Avail date |
|------------|------------|------------|-------------------|------|-------|---------------------|--------------------|--------------|----------|--------------|--------------------|------------|--------------|-------------|------------|
| M58 | 8910-AQU | 2x3 | Pentium E5400 | 2.70 | 2 | 2GB | 250GB ² | DVD±RW | GMA | VGA, DP | None | None | Pro 32 | None | Jan 10 |
| M58 | 8910-ARU | 2x3 | Core 2 Duo E7500 | 2.93 | 2 | 2GB | 250GB | DVD±RW | GMA | VGA, DP | None | None | Pro 32 | None | Jan 10 |
| M58 | 8910-AUU | 2x3 | Core 2 Quad Q9500 | 2.83 | 4 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | None | Pro 32 | None | Mar 10 |
| M58 | 8910-ASU | 2x3 | Core 2 Duo E7500 | 2.93 | 2 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | None | Pro 64 | None | Mar 10 |

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

| | | | | | | | | | | | | | | | |
|---|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning | Ultimate security, stability, and manageability for the enterprise Intel® Pentium® Processor E5400 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Quad Processor Q9500 with quad-core, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | | | | | | | | | Small <div><div>optical</div><div>disk</div><div>(in rear)</div></div> <div>Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) Slot 1: Low Profile, PCI Express 2.0 x16 Slot 2: Low Profile, 32-bit PCI 2.3</div> <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | | | | |
| Implementation | Processor in LGA775 socket | | | | | | | | | | | | | | |
| Memory | 2GB or 4GB std, 8GB max⁸, PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; 3 sockets available | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500), integrated graphics in Q45, uses main memory (up to 765MB [2GB models] or 1759MB [4GB models]), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | | | | | | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) - optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Serial port I/O control• Individual USB port disablement | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors on planar | | | | | | | | | | | | | | |
| eSATA port | One external SATA (eSATA) port | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMC® SCH5617 Super I/O | | | | | | | | | | Supports ThinkVantage® technologies | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | GREENGUARD® certified RoHS-compliant | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort), eSATA | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing, two diagnostic LEDs | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ | | | Accessories | | | | | | | | | | | | |
| - <i>Some:</i> Genuine Windows® 7 Professional 32 | | | 1GB PC3-8500 DDR3 UDIMM 45J5434 | | | | | | | | | | | | |
| - <i>Some:</i> Genuine Windows 7 Professional 64 | | | 2GB PC3-8500 DDR3 UDIMM 45J5435 | | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) | | | 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | | | | | | | | | | | | |
| • Rescue and Recovery™ | | | 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | | | | | | | | | | | | |
| • Password Manager | | | Super Multi-Burner DL DVD±RW SATA Drive 41N5620 | | | | | | | | | | | | |
| • ThinkVantage System Update | | | DisplayPort to Single-link DVI-D Cable 45J7915 | | | | | | | | | | | | |
| • ThinkVantage Power Manager | | | DisplayPort to VGA Monitor Cable 57Y4393 | | | | | | | | | | | | |
| • ThinkVantage Toolbox | | | ATI™ Radeon™ HD 3470 256MB (DP, VGA) 45K1636 | | | | | | | | | | | | |
| • Lenovo Online Data Backup | | | NVIDIA® Quadro® 256MB NVS 290 43R1765 | | | | | | | | | | | | |
| • Norton™ Internet Security 2009 (30 days of virus definitions) | | | NVIDIA Quadro 256MB FX 370 LP 55Y9275 | | | | | | | | | | | | |
| • Adobe® Reader® | | | More accessories on O-M58 sheet | | | | | | | | | | | | |
| • Adobe Flash® Player | | | Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | Other accessories at lenovo.com/accessories | | | | | | | | | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | | | | | | | | | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | | | | | | | | | | | | |

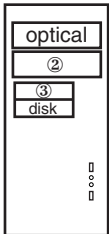
See footnotes for important warranty information

US models announced February 23, 2010; previous models on January 12, 2010

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(MLAN4-24) March 2010

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Monitor connectors | DisplayPort dongle | Intel vPro | Preload | Global Educ | Avail date |
|------------|------------|------------|-------------------|------|-------|---------------------|--------------------|--------------|----------|--------------------|--------------------|------------|---------|-------------|------------|
| M58 | 9960-AKU | 4x4 | Core 2 Duo E7500 | 2.93 | 2 | 2GB | 250GB ² | DVD±RW | GMA | VGA, DP | None | None | XP Pro | None | Nov 09 |
| M58 | 9960-ANU | 4x4 | Core 2 Quad Q9500 | 2.83 | 4 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | None | XP Pro | None | Mar 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|---|--|--|-------------------------|---------|-------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|------------------------------------|---------|--|---------|----------------------------------|---------|--------------------------------------|---------|---|---------|------------------------------|---------|-----------------------------|---------|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Quad Processor Q9500 with quad-core, 1333MHz system bus, and 6MB L2 cache | | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.3" D X 15.8" H• 175mm W X 440mm D X 402mm H• 24.2 lb (11.0 kg) in max configuration• Handle on top front• Toolless cover removal• Toolless disk, diskette drive, optical drive removal• Toolless adapter retention | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | Processor in LGA775 socket | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk Slot 1: half-length,full-height, PCIe 2.0 x16 (75w max) Slot 2: half-length,full-height, PCIe x1 Slot 3: half-length,full-height, 32-bit PCI 2.3 Slot 4: half-length,full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 2GB or 4GB std, 8GB max ⁸ , PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; 3 sockets available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500) , integrated graphics in Q45, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm, vibration dampening | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), three SATA connectors and one eSATA connector on planar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Serial port I/O control• Individual USB port disablement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | Supports ThinkVantage® technologies GREENGUARD® certified RoHS-compliant Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service®⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, manual switch, two diagnostic LEDs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional | | | | Accessories <table><tr><td>1GB PC3-8500 DDR3 UDIMM</td><td>45J5434</td></tr><tr><td>2GB PC3-8500 DDR3 UDIMM</td><td>45J5435</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>Blu-ray™ Burner SATA 1.5Gb/s Drive</td><td>45K1675</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® GeForce® 9500GT 512MB (DP, DVI)</td><td>45K1635</td></tr><tr><td>NVIDIA Quadro® 256MB NVS 290</td><td>43R1765</td></tr><tr><td>NVIDIA Quadro 256MB NVS 295</td><td>45K1669</td></tr></table> More accessories on O-M58 sheet Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | | | | | 1GB PC3-8500 DDR3 UDIMM | 45J5434 | 2GB PC3-8500 DDR3 UDIMM | 45J5435 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® GeForce® 9500GT 512MB (DP, DVI) | 45K1635 | NVIDIA Quadro® 256MB NVS 290 | 43R1765 | NVIDIA Quadro 256MB NVS 295 | 45K1669 |
| 1GB PC3-8500 DDR3 UDIMM | 45J5434 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC3-8500 DDR3 UDIMM | 45J5435 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® GeForce® 9500GT 512MB (DP, DVI) | 45K1635 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro® 256MB NVS 290 | 43R1765 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro 256MB NVS 295 | 45K1669 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• McAfee® VirusScan® Plus (30 days of virus definitions)• Lenovo System Toolbox• Adobe® Reader®• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

US model announced February 23, 2010; previous models on November 3, 2009

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(MLAN4-12) March 2010

Personal Systems Reference (PSREF)

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

See footnotes for important warranty information

ThinkCentre® M58p Eco Ultra Small (9961) - TopS (XP with Win 7 License) Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Monitor conn | DisplayPort dongle | ENERGY STAR 5.0 | Intel vPro Preload | Global Educ | Avail date |
|-------------|------------|------------|------------------|------|-------|---------------------|--------------------|--------------|----------|--------------|--------------------|-----------------|--------------------|-------------|------------|
| M58p | 9961-AKU | 1x2 | Core 2 Duo E8400 | 3.00 | 2 | 2GB | 250GB ² | DVD±RW | GMA | VGA, DP | None | ES50 | vPro XP Pro | No | Nov 09 |

- **Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)**
- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This model has a 3-year limited warranty¹**

| | | | | | |
|--|---|---|--|--|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ 2 Duo Processor E8400 with dual-core, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | Eco Ultra Small <div><div>optical</div><div>disk</div></div> | | |
| Implementation | Processor in LGA775 socket | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Slot 1: Low Profile, 32-bit PCI 2.3 | | |
| Memory | 2GB std , 4GB max ⁸ , PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SODIMM sockets (notebook); <i>Non-italics</i> : standard memory in one socket; one socket available | | <ul style="list-style-type: none">• Business black color; metal case• 10.8" W X 9.4" D X 3.1" H• 275mm W X 238mm D X 80mm H• 9.2 lb (4.2 kg) in maximum configuration• Hinged toolless cover for easy serviceability• Toolless disk and optical drive removal• Toolless systemboard retention• System floor stand for vertical orientation | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500) , integrated graphics in Q45, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) - security slot and cover release button are combined into one latch for improved chassis security• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Individual USB port disablement | | |
| SATA disk | 250GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors and one eSATA connector on planar | | | | |
| eSATA port | None | | Supports ThinkVantage® technologies | | |
| Diskette drive | None | | | | |
| Media reader | None | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | |
| Rear ports | Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | |
| Speaker | One internal speaker for business audio | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | |
| Modem | None | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | |
| Power supply | External AC/DC adapter, 130 watts, autosensing, 87% PSU | | | | |
| Preloaded operating system²⁰ | | Accessories | | | |
| - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional | | 1GB PC3-8500 DDR3 SODIMM (notebook) 43R1987 2GB PC3-8500 DDR3 SODIMM (notebook) 43R1988 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 DisplayPort to Single-link DVI-D Cable 45J7915 DisplayPort to VGA Monitor Cable 57Y4393 Lenovo Vertical PC and Monitor Stand II 41R4474 ThinkCentre Ultra Small Under Desk Mount 40Y8625 More accessories on O-M58 sheet | | | |
| Preloaded applications⁵ (only some listed) | | Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | | |
| • Rescue and Recovery™ | | | | | |
| • Client Security Solution™ | | | | | |
| • ThinkVantage Productivity Center | | | | | |
| • ThinkVantage System Update | | | | | |
| • McAfee® VirusScan® Plus (30 days of virus definitions) | | | | | |
| • Lenovo System Toolbox | | | | | |
| • Adobe® Reader® | | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | | |
| • Corel® WinDVD® (DVD±RW) | | | | | |

See footnotes for important warranty information
US model announced November 3, 2009

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(MLAN4-14) November 2009

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Monitor conn | DisplayPort dongle | ENERGY STAR 5.0 | Intel vPro | Win7 preload | Global Educ | Avail date |
|-------------|------------|------------|------------------|------|-------|---------------------|--------------------|--------------|----------|--------------|--------------------|-----------------|------------|--------------|-------------|------------|
| M58p | 9961-ALU | 1x2 | Core 2 Duo E8400 | 3.00 | 2 | 2GB | 250GB ² | DVD±RW | GMA | VGA, DP | None | ES50 | vPro | Pro 32 | No | Jan 10 |

- **Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)**
- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This model has a 3-year limited warranty¹**

| | | | | | |
|---|---|---|---|--|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ 2 Duo Processor E8400 with dual-core, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | Eco Ultra Small | | <div><div>optical</div><div>disk</div></div> |
| Implementation | | | | | |
| Memory | 2GB std , 4GB max ⁸ , PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SODIMM sockets (notebook); <i>Non-italics</i> : standard memory in one socket; one socket available | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Slot 1: Low Profile, 32-bit PCI 2.3 | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500) , integrated graphics in Q45, uses main memory (up to 765MB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | <ul style="list-style-type: none">• Business black color; metal case• 10.8" W X 9.4" D X 3.1" H• 275mm W X 238mm D X 80mm H• 9.2 lb (4.2 kg) in maximum configuration• Hinged toolless cover for easy serviceability• Toolless disk and optical drive removal• Toolless systemboard retention• System floor stand for vertical orientation | | |
| SATA disk | 250GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- security slot and cover release button are combined into one latch for improved chassis security• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Individual USB port disablement |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors and one eSATA connector on planar | | | | |
| eSATA port | None | | | | Supports ThinkVantage® technologies |
| Diskette drive | None | | | | |
| Media reader | None | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant |
| Rear ports | Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | |
| Speaker | One internal speaker for business audio | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | |
| Modem | None | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | |
| Power supply | External AC/DC adapter, 130 watts, autosensing, 87% PSU | | | | |
| Preloaded operating system²⁰ | | Accessories | | | |
| - Genuine Windows® 7 Professional 32 | | 1GB PC3-8500 DDR3 SODIMM (notebook) 43R1987 | | | |
| Preloaded applications⁵ (only some listed) | | 2GB PC3-8500 DDR3 SODIMM (notebook) 43R1988 | | | |
| • Rescue and Recovery™ | | 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | | | |
| • Password Manager | | 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | | | |
| • ThinkVantage System Update | | Super Multi-Burner DL DVD±RW SATA Drive 41N5620 | | | |
| • ThinkVantage Power Manager | | DisplayPort to Single-link DVI-D Cable 45J7915 | | | |
| • ThinkVantage Toolbox | | DisplayPort to VGA Monitor Cable 57Y4393 | | | |
| • Lenovo Online Data Backup | | Lenovo Vertical PC and Monitor Stand II 41R4474 | | | |
| • Norton™ Internet Security 2009 (30 days of virus definitions) | | ThinkCentre Ultra Small Under Desk Mount 40Y8625 | | | |
| • Adobe® Reader® | | More accessories on O-M58 sheet | | | |
| • Adobe Flash® Player | | Acc Guide in pdf lenovo.com/accessoriesguide | | | |
| • Microsoft® Office 2007 Trial (60-day) | | Other accessories at lenovo.com/accessories | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | | |

ThinkCentre® M58p Small (9964) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics connectors | Monitor DisplayPort | dongle | vPro | Preload | Global Educ | Avail date | | | | | | |
|--|--|------------|---|------|-------|---------------------|--------------------|--------------|---------------------|---|--------|------|---------|-------------|------------|---|--|--|--|--|--|
| M58p | 9964-A7U | 2x3 | Core 2 Duo E8400 | 3.00 | 2 | 2GB | 250GB ² | DVD±RW | GMA | VGA, DP | None | vPro | XP Pro | None | Nov 09 | | | | | | |
| M58p | 9964-A8U | 2x3 | Core 2 Quad Q9400 | 2.66 | 4 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | vPro | XP Pro | None | Nov 09 | | | | | | |
| <ul style="list-style-type: none">• Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)• These small and medium business (SMB) models are part of the US TopSeller™ Program• These models have a 3-year limited warranty¹ | | | | | | | | | | | | | | | | | | | | | |
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ 2 Duo Processor E8400 with dual-core , Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache or Intel Core 2 Quad Processor Q9400 with quad-core , Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | | | | | | | | Small <div><div>optical</div><div>disk (in rear)</div></div> <div>Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader)</div> <div>Slot 1: Low Profile, PCI Express 2.0 x16 Slot 2: Low Profile, 32-bit PCI 2.3</div> <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | | | | | | | | | | | |
| Implementation | | | | | | | | | | | | | | | | | | | | | |
| Memory | 2GB or 4GB std, 8GB max ⁸ , PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; 3 sockets available | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500), integrated graphics in Q45, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB, SATA 3.0Gb/s 7200 rpm, vibration dampening | | | | | | | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Serial port I/O control• Individual USB port disablement | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors on planar | | | | | | | | | | | | | | | | | | | | |
| eSATA port | One external SATA (eSATA) port | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort), eSATA | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | Supports ThinkVantage® technologies | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | GREENGUARD® certified RoHS-compliant | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing, two diagnostic LEDs | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system ²⁰ | | | Accessories | | | | | | | | | | | | | | | | | | |
| - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional | | | 1GB PC3-8500 DDR3 UDIMM | | | 45J5434 | | | | | | | | | | | | | | | |
| | | | 2GB PC3-8500 DDR3 UDIMM | | | 45J5435 | | | | | | | | | | | | | | | |
| | | | 500GB SATA 3.0Gb/s Disk (7200 rpm) | | | 43R1990 | | | | | | | | | | | | | | | |
| | | | 1TB SATA 3.0Gb/s Disk (7200 rpm) | | | 45J7918 | | | | | | | | | | | | | | | |
| Preloaded applications ⁵ (only some listed) | | | Super Multi-Burner DL DVD±RW SATA Drive | | | 41N5620 | | | | | | | | | | | | | | | |
| • Rescue and Recovery™ | | | DisplayPort to Single-link DVI-D Cable | | | 45J7915 | | | | | | | | | | | | | | | |
| • Client Security Solution™ | | | DisplayPort to VGA Monitor Cable | | | 57Y4393 | | | | | | | | | | | | | | | |
| • ThinkVantage Productivity Center | | | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | | | 45K1636 | | | | | | | | | | | | | | | |
| • ThinkVantage System Update | | | NVIDIA® Quadro® 256MB NVS 290 | | | 43R1765 | | | | | | | | | | | | | | | |
| • McAfee® VirusScan® Plus (30 days of virus definitions) | | | NVIDIA Quadro 256MB FX 370 LP | | | 55Y9275 | | | | | | | | | | | | | | | |
| • Lenovo System Toolbox | | | More accessories on O-M58 sheet | | | | | | | | | | | | | | | | | | |
| • Adobe® Reader® | | | Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | | | | | | | | | | | | | | | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | | | | | | | | | | | | | | | | | | |
| • Corel® WinDVD® (DVD±RW) | | | | | | | | | | | | | | | | | | | | | |
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See footnotes for important warranty information

US models announced November 3, 2009

≡ **US model withdrawn effective April 2010**

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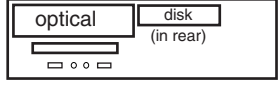
(MLAN4-15) November 2009

ThinkCentre® M58p Small (9964) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Monitor connectors | DisplayPort dongle | Intel vPro | Win7 preload | Global Educ | Avail date |
|-------------|------------|------------|-------------------|------|-------|---------------------|--------------------|--------------|----------|--------------------|--------------------|------------|--------------|-------------|------------|
| M58p | 9964-ABU | 2x3 | Core 2 Duo E8400 | 3.00 | 2 | 2GB | 250GB ² | DVD±RW | GMA | VGA, DP | None | vPro | Pro 32 | None | Jan 10 |
| M58p | 9964-ACU | 2x3 | Core 2 Quad Q9400 | 2.66 | 4 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | vPro | Pro 32 | None | Jan 10 |
| M58p | 9964-ADU | 2x3 | Core 2 Duo E8400 | 3.00 | 2 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | vPro | Pro 64 | None | Mar 10 |

- **Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)**
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

| | | | |
|---|--|---|---|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ 2 Duo Processor E8400 with dual-core, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache or Intel Core 2 Quad Processor Q9400 with quad-core, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache | | Small  |
| Implementation | Processor in LGA775 socket | | |
| Memory | 2GB or 4GB std, 8GB max ⁸ , PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; 3 sockets available | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500) , integrated graphics in Q45, uses main memory (up to 765MB [2GB models] or 1759MB [4GB models]), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) Slot 1: Low Profile, PCI Express 2.0 x16 Slot 2: Low Profile, 32-bit PCI 2.3 <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm, vibration dampening mounts | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Serial port I/O control• Individual USB port disablement |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 support | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors on planar | | |
| eSATA port | One external SATA (eSATA) port | | |
| Diskette drive | None | | |
| Media reader | None | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort), eSATA | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | |
| Speaker | One internal speaker for business audio | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | |
| Modem | None | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | |
| Power supply | 280 watts with variable speed fan, autosensing, two diagnostic LEDs | | |
| Preloaded operating system²⁰ | | Accessories | |
| - <i>Some:</i> Genuine Windows® 7 Professional 32 | | 1GB PC3-8500 DDR3 UDIMM | 45J5434 |
| - <i>Some:</i> Genuine Windows 7 Professional 64 | | 2GB PC3-8500 DDR3 UDIMM | 45J5435 |
| Preloaded applications⁵ (only some listed) | | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 |
| • Rescue and Recovery™ | | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 |
| • Password Manager | | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 |
| • ThinkVantage System Update | | DisplayPort to Single-link DVI-D Cable | 45J7915 |
| • ThinkVantage Power Manager | | DisplayPort to VGA Monitor Cable | 57Y4393 |
| • ThinkVantage Toolbox | | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 |
| • Lenovo Online Data Backup | | NVIDIA® Quadro® 256MB NVS 290 | 43R1765 |
| • Norton™ Internet Security 2009 (30 days of virus definitions) | | NVIDIA Quadro 256MB FX 370 LP | 55Y9275 |
| • Adobe® Reader® | | More accessories on O-M58 sheet | |
| • Adobe Flash® Player | | Acc Guide in pdf lenovo.com/accessoriesguide | |
| • Microsoft® Office 2007 Trial (60-day) | | Other accessories at lenovo.com/accessories | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | |
| • Roxio MyDVD® (DVD±RW) | | | |
| Limited Warranty¹ | | | |
| ⇨ 3-year parts and labor | | | |
| ⇨ International Warranty Service⁹ | | | |
| ⇨ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) | | | |
| ⇨ Onsite service upgrade options (in eligible locations):⁷ | | | |
| • 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192) | | | |
| • 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193) | | | |
| • 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194) | | | |
| • 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195) | | | |
| • 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196) | | | |
| ⇨ ThinkPlus services at lenovo.com/thinkplus/warranty | | | |
| ⇨ Post warranty maintenance services available | | | |
| ⇨ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | |

See footnotes for important warranty information

US model announced February 23, 2010; previous models on January 12, 2010


US model withdrawn effective April 2010

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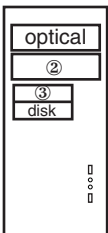
(MLAN4-27) February 2010

ThinkCentre® M58p Tower (9965) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Monitor connectors | DisplayPort dongle | Intel vPro | Preload | Global Educ | Avail date | |
|---|-------------|------------|-----------|-------------------|-------|---------------------|-----------|--------------------|----------|--------------------|--------------------|------------|---------|-------------|------------|--------|
|  | M58p | 9965-A6U | 4x4 | Core 2 Duo E8400 | 3.00 | 2 | 2GB | 250GB ² | DVD±RW | GMA | VGA, DP | None | vPro | XP Pro | None | Nov 09 |
| | M58p | 9965-A7U | 4x4 | Core 2 Quad Q9400 | 2.66 | 4 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | vPro | XP Pro | None | Nov 09 |

- **Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)**
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

| | | | | | | | | | | | | | | | |
|-----------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Core™ 2 Duo Processor E8400 with dual-core , Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache or Intel Core 2 Quad Processor Q9400 with quad-core , Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | | | | | | | | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.3" D X 15.8" H• 175mm W X 440mm D X 402mm H• 24.2 lb (11.0 kg) in max configuration• Handle on top front• Toolless cover removal• Toolless disk, diskette drive, optical drive removal• Toolless adapter retention  | | | | |
| Implementation | Processor in LGA775 socket | | | | | | | | | | | | | | |
| Memory | 2GB or 4GB std , 8GB max ⁸ , PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; 3 sockets available | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator 4500 (GMA 4500) , integrated graphics in Q45, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display | | | | | | | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk Slot 1: half-length, full-height, PCIe 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3 | | | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm, vibration dampening | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), three SATA connectors and one eSATA connector on planar | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | |
| Chipset | Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller Hub 10 Digital Office [ICH10DO] (SATA 3.0Gb/s with RAID 0/1 support, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Analog Devices AD1882 codec | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, DASH 1.0 | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | |
| Security chip | Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, manual switch, two diagnostic LEDs | | | | | | | | | | | | | | |

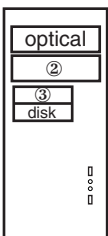
| | | |
|---|--|---|
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• McAfee® VirusScan® Plus (30 days of virus definitions)• Lenovo System Toolbox• Adobe® Reader®• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) | Accessories <ul style="list-style-type: none">1GB PC3-8500 DDR3 UDIMM 45J54342GB PC3-8500 DDR3 UDIMM 45J5435500GB SATA 3.0Gb/s Disk (7200 rpm) 43R19901TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918Super Multi-Burner DL DVD±RW SATA Drive 41N5620Blu-ray™ Burner SATA 1.5Gb/s Drive 45K1675DisplayPort to Single-link DVI-D Cable 45J7915DisplayPort to VGA Monitor Cable 57Y4393ATI™ Radeon™ HD 3470 256MB (DP, VGA) 45K1636NVIDIA® GeForce® 9500GT 512MB (DP, DVI) 45K1635NVIDIA Quadro® 256MB NVS 290 43R1765NVIDIA Quadro 256MB NVS 295 45K1669More accessories on O-M58 sheet <p>Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories</p> | Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 |
|---|--|---|

ThinkCentre® M58p Tower (9965) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Name | Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Graphics | Monitor connectors | DisplayPort dongle | Intel vPro | Win7 preload | Global Educ | Avail date |
|-------------|------------|------------|-------------------|------|-------|---------------------|--------------------|--------------|----------|--------------------|--------------------|------------|--------------|-------------|------------|
| M58p | 9965-A9U | 4x4 | Core 2 Duo E8400 | 3.00 | 2 | 2GB | 250GB ² | DVD±RW | GMA | VGA, DP | None | vPro | Pro 32 | None | Jan 10 |
| M58p | 9965-ABU | 4x4 | Core 2 Quad Q9400 | 2.66 | 4 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | vPro | Pro 32 | None | Jan 10 |
| M58p | 9965-ACU | 4x4 | Core 2 Duo E8400 | 3.00 | 2 | 4GB | 320GB | DVD±RW | GMA | VGA, DP | None | vPro | Pro 64 | None | Mar 10 |

- **Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)**
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ 2 Duo Processor E8400 with dual-core , Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache or Intel Core 2 Quad Processor Q9400 with quad-core , Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket | | | | | | | | | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.3" D X 15.8" H• 175mm W X 440mm D X 402mm H• 24.2 lb (11.0 kg) in max configuration• Handle on top front• Toolless cover removal• Toolless disk, diskette drive, optical drive removal• Toolless adapter retention  | | | | | | | | | | | | | | | | | | |
| Implementation | 2GB or 4GB std, 8GB max ⁸ , PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; 3 sockets available | | | | | | | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk Slot 1: half-length, full-height, PCIe 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | |
| Memory | Security <ul style="list-style-type: none">• Security chip (see information on left)• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Power-on password• Administrator password• Hard disk password (user and master)• Boot sequence control• Boot without diskette, keyboard• Serial port I/O control• Individual USB port disablement | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal connector | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ | | | | | | | | | | | | | | | | Accessories | | | | | | | | | | | | | |
| - <i>Some:</i> Genuine Windows® 7 Professional 32 | | | | | | | | | | | | | | | | 1GB PC3-8500 DDR3 UDIMM 45J5434 | | | | | | | | | | | | | |
| - <i>Some:</i> Genuine Windows 7 Professional 64 | | | | | | | | | | | | | | | | 2GB PC3-8500 DDR3 UDIMM 45J5435 | | | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) | | | | | | | | | | | | | | | | 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | | | | | | | | | | | | | |
| • Rescue and Recovery™ | | | | | | | | | | | | | | | | 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | | | | | | | | | | | | | |
| • Password Manager | | | | | | | | | | | | | | | | Super Multi-Burner DL DVD±RW SATA Drive 41N5620 | | | | | | | | | | | | | |
| • ThinkVantage System Update | | | | | | | | | | | | | | | | Blu-ray™ Burner SATA 1.5Gb/s Drive 45K1675 | | | | | | | | | | | | | |
| • ThinkVantage Power Manager | | | | | | | | | | | | | | | | DisplayPort to Single-link DVI-D Cable 45J7915 | | | | | | | | | | | | | |
| • ThinkVantage Toolbox | | | | | | | | | | | | | | | | DisplayPort to VGA Monitor Cable 57Y4393 | | | | | | | | | | | | | |
| • Norton™ Internet Security 2009 (30 days of virus definitions) | | | | | | | | | | | | | | | | ATI™ Radeon™ HD 3470 256MB (DP, VGA) 45K1636 | | | | | | | | | | | | | |
| • Adobe® Reader® | | | | | | | | | | | | | | | | NVIDIA® GeForce® 9500GT 512MB (DP, DVI) 45K1635 | | | | | | | | | | | | | |
| • Adobe Flash® Player | | | | | | | | | | | | | | | | NVIDIA Quadro® 256MB NVS 290 43R1765 | | | | | | | | | | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | | | | | | | | | | | | | NVIDIA Quadro 256MB NVS 295 45K1669 | | | | | | | | | | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | | | | | | | | | | | | | More accessories on O-M58 sheet | | | | | | | | | | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | | | | | | | | | | | | | Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | Other accessories at lenovo.com/accessories | | | | | | | | | | | | | |
| Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

US model announced February 23, 2010; previous models on January 12, 2010

US model withdrawn effective April 2010

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(MLAN4-28) February 2010

Partial list of accessories supported on ThinkCentre M58 and M58p**Memory**

Eco Ultra Small 8820/7359/7637/9961/7479/6136 use notebook memory:

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 SODIMM (notebook) | 43R1987 | ann 08/05/08 |
| 1GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0551 | ann 03/17/09 |
| 2GB PC3-8500 DDR3 SODIMM (notebook) | 43R1988 | ann 08/05/08 |
| 2GB PC3-8500 DDR3 SODIMM (25-Pack) | 51J0552 | ann 03/17/09 |
| 1GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3706 | ann 06/23/09 |
| 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4385 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 Low-Halogen SODIMM | 55Y3707 | ann 06/23/09 |
| 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) | 57Y4386 | ann 06/23/09 |

Small 8910/7360/6258/7638/9964/7483/7220/6137/6234, and

Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/7639 use desktop memory:

| | | |
|-----------------------------------|---------|--------------|
| 1GB PC3-8500 DDR3 UDIMM | 45J5434 | ann 11/18/08 |
| 1GB PC3-8500 DDR3 UDIMM (25-Pack) | 57Y4421 | ann 11/10/09 |
| 2GB PC3-8500 DDR3 UDIMM | 45J5435 | ann 11/18/08 |
| 2GB PC3-8500 DDR3 UDIMM (25-Pack) | 57Y4422 | ann 11/10/09 |

Optical

All:

| | | |
|--|---------|--------------|
| DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴ | 41N5618 | ann 09/26/06 |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | ann 09/26/06 |

Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/7639 support:

| | | |
|------------------------------------|---------|--------------|
| Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | ann 03/31/09 |
|------------------------------------|---------|--------------|

Storage and removable storage

| | | |
|--|---------|--------------|
| 160GB SATA 3.0Gb/s Disk (7200 rpm) | 09N4254 | ann 05/19/03 |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | ann 01/24/06 |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | ann 11/06/07 |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | ann 08/19/08 |
| 150GB SATA 3.0Gb/s Disk (10000 rpm) 2.5" | 43R2030 | ann 03/31/09 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Graphics

Small 8910/7360/6258/7638/9964/7483/7220/6137/6234 support Low Profile:

| | | |
|--|---------|--------------|
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ann 11/06/07 |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | ann 11/18/08 |
| NVIDIA® Quadro® 256MB NVS 290 | 43R1765 | ann 12/18/07 |
| NVIDIA Quadro 256MB FX 370 Low-Profile | 55Y9275 | ann 07/28/09 |
| NVIDIA GeForce® 310 DMS59 (2-DVI, 2-VGA) | 57Y4167 | ann 03/02/10 |

Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/7639 support 75 watts max:

| | | |
|---|---------|--------------|
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ann 11/06/07 |
| ATI Radeon HD 3470 256MB (DP, VGA) | 45K1636 | ann 11/18/08 |
| NVIDIA Quadro 256MB NVS 290 | 43R1765 | ann 12/18/07 |
| NVIDIA Quadro 256MB NVS 295 | 45K1669 | ann 04/21/09 |
| NVIDIA GeForce 9500 GT 512MB (DP, DVI) | 45K1635 | ann 11/18/08 |
| NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA) | 57Y4167 | ann 03/02/10 |

More information at www.lenovo.com/support/graphiccards

Keyboard

| | | |
|--|---------|--------------|
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Preferred Pro Full Size PS/2 Keyboard | 31P7415 | ann 06/04/02 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultrasmall Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

| | | |
|---|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo ScrollPoint® Mouse(USB, Optical) | 31P7405 | ann 08/27/02 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann 11/25/08 |

More information at www.lenovo.com/support/mice

Multimedia

| | | |
|-----------------------------|---------|--------------|
| ThinkPad® In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|-----------------------------|---------|--------------|

Security

| | | |
|--|---------|--------------|
| Kensington® MicroSaver® Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Mounting Device

Eco Ultra Small 8820/7359/7637/9961/7479/6136 support under desk mounting device:

| | | |
|--|---------|--------------|
| ThinkCentre Ultra Small Under Desk Mount | 40Y8625 | ann 09/06/05 |
|--|---------|--------------|

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

More information at www.lenovo.com/thinkvision

Monitor Accessories⁴⁶

Eco Ultra Small 8820/7359/7637/9961/7479/6136 support:

| | | |
|---|---------|--------------|
| Lenovo Vertical PC and Monitor Stand II | 41R4474 | ann 01/27/09 |
|---|---------|--------------|

All:

| | | |
|--|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| DisplayPort™ to Single-link DVI-D Cable | 45J7915 | ann 08/05/08 |
| DisplayPort to VGA Monitor Cable | 57Y4393 | ann 08/04/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

Medialess License Key (MLK)

| | | |
|---|---------|--------------|
| Microsoft® Office 2007 Basic, English | 43R1528 | ann 07/03/07 |
| Microsoft Office 2007 Small Business, Engl | 43R1534 | ann 07/03/07 |
| Microsoft Office 2007 Professional, English | 43R1531 | ann 07/03/07 |

For more information on desktop accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo ThinkCentre M90/M90p Eco USFF



Lenovo ThinkCentre M90/M90p Eco USFF



Lenovo ThinkCentre M90/M90p SFF



Lenovo ThinkCentre M90/M90p SFF
with ThinkVision L2251x (2578-HB6)



Lenovo ThinkCentre M90/M90p Tower



Lenovo ThinkCentre M90/M90p Tower

ThinkCentre® M90 Eco Ultra Small (3244) - TopS (XP with Win7 License)

Personal Systems Reference (PSREF)

| Type-model | Slot x bay | Processor | GHz | Cores | Memory ^a | SATA disk | SATA optical | Integrated graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Preload | Recovery DVD | Global Educ | Avail date |
|------------|------------|---------------|------|-------|---------------------|--------------------|--------------|---------------------|--------------|-----------------|------------|---------|--------------|-------------|------------|
| 3244-A1U | 1x2 | Core i3-530 | 2.93 | 2 | 2GB | 250GB ² | DVD±RW | Intel HD | VGA, DP | ES50 | None | XP Pro | Pro 32 | None | Feb 10 |
| 3244-A2U | 1x2 | Pentium G6950 | 2.80 | 2 | 2GB | 250GB | DVD±RW | Intel HD | VGA, DP | ES50 | None | XP Pro | Pro 32 | None | Feb 10 |

- **The most powerful, stable, and manageable desktop with next generation Intel platform**
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

| | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|---|---------|--|---------|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Pentium® Processor G6950 with dual-core , Intel 64, Virtualization Technology, integrated 1066MHz dual-channel DDR3 memory controller, 3MB cache or Intel Core™ i3 Processor i3-530 with dual-core , Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache Processor in LGA1156 socket | | | Eco Ultra Small <div><div>optical</div><div>disk</div></div> | | | | | | | | | | | | | | | |
| Implementation | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Slot 1: Low Profile, 32-bit PCI 2.3 | | | | | | | | | | | | | | | |
| Memory | 2GB std, 4GB max, PC3-10600 1333MHz DDR3* , two 204-pin SODIMM sockets (notebook); <i>Non-italics:</i> standard memory in one socket; one socket available * System automatically clocks down for processors with 1066MHz DDR3 memory controller | | | <ul style="list-style-type: none">• Business black color; metal case• 11.0" W X 9.4" D X 3.1" H• 279mm W X 238mm D X 79mm H• 9.2 lb (4.2 kg) in maximum configuration• Hinged toolless cover for easy serviceability• Toolless disk and optical drive removal• System floor stand for vertical orientation | | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics in processor, HDCP, DirectX® 10**, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display ** DirectX 10 is only available with Windows Vista and later | | | | | | | | | | | | | | | | | | |
| DP dongle | None | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Individual USB port disablement | | | | | | | | | | | | | | | |
| SATA disk | 250GB, SATA 3.0Gb/s 7200 rpm | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, two SATA connectors for disk and optical | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | Environmental Features <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q57 Express Chipset, Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | | | | | | | | | | | | | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | |
| Modem | None | | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | | | | | |
| Power supply | External AC/DC adapter, 130 watts, autosensing, 87% PSU | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional (with Windows 7 Professional 32 Recovery DVD) | | | Accessories <table><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>Lenovo Vertical PC and Monitor Stand II</td><td>41R4474</td></tr><tr><td>ThinkCentre Ultra Small Under Desk Mount</td><td>40Y8625</td></tr></table> More accessories on O-M90 sheet | | | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | Lenovo Vertical PC and Monitor Stand II | 41R4474 | ThinkCentre Ultra Small Under Desk Mount | 40Y8625 |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | |
| Lenovo Vertical PC and Monitor Stand II | 41R4474 | | | | | | | | | | | | | | | | | | |
| ThinkCentre Ultra Small Under Desk Mount | 40Y8625 | | | | | | | | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• ThinkVantage Power Manager• Lenovo System Toolbox• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Corel® Burn.Now™ (DVD±RW)• Corel DVD MovieFactory® (DVD±RW)• Corel WinDVD® (DVD±RW) | | | Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

US models announced January 15, 2010

⚡ US model withdrawn effective February 2010

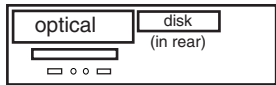
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(MELB1-7) January 2010

| Type-model | Slot x bay | Processor | GHz | Cores | Memory ⁸ | SATA disk | SATA optical | Integrated graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Win7 preload | Global Educ | Avail date |
|------------|------------|-------------|------|-------|---------------------|--------------------|--------------|---------------------|--------------|-----------------|------------|--------------|-------------|------------|
| 3244-A8U | 1x2 | Core i3-530 | 2.93 | 2 | 2GB | 250GB ² | DVD±RW | Intel HD | VGA, DP | ES50 | None | Pro 32 | None | Mar 10 |

- **The most powerful, stable, and manageable desktop with next generation Intel platform**
- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This model has a 3-year limited warranty¹**

| | | | | | | |
|---|--|--|--|--|--|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i3 Processor i3-530 with dual-core, Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache | | | <div>Eco Ultra Small</div> <div><div>optical</div><div>disk</div></div> <div><div>Bay ① 5.25", 1.6" high, access, std optical</div><div>Bay ② 3.5", 1" high, no access, std disk</div><div>Slot 1: Low Profile, 32-bit PCI 2.3</div><div><div>• Business black color; metal case</div><div>• 11.0" W X 9.4" D X 3.1" H</div><div>• 279mm W X 238mm D X 79mm H</div><div>• 9.2 lb (4.2 kg) in maximum configuration</div><div>• Hinged toolless cover for easy serviceability</div><div>• Toolless disk and optical drive removal</div><div>• System floor stand for vertical orientation</div></div></div> | | |
| Implementation | Processor in LGA1156 socket | | | | | |
| Memory | 2GB std, 4GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook); <i>Non-italics</i> : standard memory in one socket; one socket available | | | <div><div>Security</div><div><div>• Security chip (see information on left)</div><div>• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)</div><div>• Power-on password</div><div>• Hard disk password</div><div>• Boot sequence control</div><div>• Boot without keyboard and mouse</div><div>• Individual USB port disablement</div></div></div> <div><div>Environmental Features</div><div><div>• EPEAT™ Gold rating</div><div>• ENERGY STAR® 5.0-compliant</div><div>• GREENGUARD® certified</div><div>• RoHS-compliant</div></div></div> <div>Supports ThinkVantage® technologies</div> <div><div>Limited Warranty¹</div><div><div>⇒ 3-year parts and labor</div><div>⇒ International Warranty Service⁹</div><div>⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)</div><div>⇒ Onsite service upgrade options (in eligible locations):⁷</div><div><div>• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)</div><div>• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)</div><div>• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)</div><div>• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)</div><div>• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)</div></div><div>⇒ ThinkPlus services at lenovo.com/thinkplus/warranty</div><div>⇒ Post warranty maintenance services available</div><div>⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378</div></div></div> | | |
| Graphics | Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 765MB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display | | | | | |
| DP dongle | None | | | | | |
| SATA disk | 250GB , SATA 3.0Gb/s 7200 rpm | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, two SATA connectors for disk and optical | | | | | |
| eSATA port | None | | | | | |
| Diskette drive | None | | | | | |
| Media reader | None | | | | | |
| Chipset | Intel Q57 Express Chipset , Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | |
| Rear ports | Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | |
| Speaker | Internal speaker for business audio | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | |
| Intel AMT | None | | | | | |
| Modem | None | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | |
| Power supply | External AC/DC adapter, 130 watts, autosensing, 87% PSU | | | | | |
| <div><div>Preloaded operating system²⁰</div><div>- Genuine Windows® 7 Professional 32</div><div>Preloaded applications⁵ (only some listed)</div><div><div>• Rescue and Recovery™</div><div>• Password Manager</div><div>• ThinkVantage System Update</div><div>• ThinkVantage Power Manager</div><div>• ThinkVantage Toolbox</div><div>• Norton™ Internet Security 2009 (30 days of virus definitions)</div><div>• Adobe® Reader®</div><div>• Adobe Flash® Player</div><div>• Skype™ for Windows</div><div>• Microsoft® Office 2007 Trial (60-day)</div><div>• Corel® Burn.Now™ (DVD±RW)</div><div>• Corel DVD MovieFactory® (DVD±RW)</div></div></div> <div><div>Accessories</div><div><div>500GB SATA 3.0Gb/s Disk (7200 rpm)43R1990</div><div>1TB SATA 3.0Gb/s Disk (7200 rpm)45J7918</div><div>Super Multi-Burner DL DVD±RW SATA Drive41N5620</div><div>DisplayPort to Single-link DVI-D Cable45J7915</div><div>DisplayPort to VGA Monitor Cable57Y4393</div><div>Lenovo Vertical PC and Monitor Stand II41R4474</div><div>ThinkCentre Ultra Small Under Desk Mount40Y8625</div><div>More accessories on O-M90 sheet</div><div>Acc Guide in pdf lenovo.com/accessoriesguide</div><div>Other accessories at lenovo.com/accessories</div></div></div> | | | | | | |

| Type-model | Slot x bay | Processor | GHz | Cores | Memory ^a | SATA disk | SATA optical | Graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Preload | Recovery DVD | Global Educ | Avail date |
|--|--|---------------|------|-------|---------------------|---|--------------|----------|--|-----------------|--|---------|--------------|-------------|------------|
| 3245-A1U | 2x3 | Core i3-530 | 2.93 | 2 | 2GB | 250GB ² | DVD±RW | Intel HD | VGA, DP | ES50 | None | XP Pro | Pro 32 | None | Feb 10 |
| 3245-A2U | 2x3 | Pentium G6950 | 2.80 | 2 | 2GB | 250GB | DVD±RW | Intel HD | VGA, DP | ES50 | None | XP Pro | Pro 32 | None | Feb 10 |
| 3245-A8U | 2x3 | Core i5-750 | 2.66 | 4 | 3GB | 500GB | DVD±RW | 310 | VGA, DP | ES50 | None | XP Pro | Pro 32 | None | Feb 10 |
| <ul style="list-style-type: none">• The most powerful, stable, and manageable desktop with next generation Intel platform• These small and medium business (SMB) models are part of the US TopSeller™ Program• These models have a 3-year limited warranty¹ | | | | | | | | | | | | | | | |
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Pentium® Processor G6950 with dual-core, Intel 64, Virtualization Technology, integrated 1066MHz dual-channel DDR3 memory controller, 3MB cache or Intel Core™ i3 Processor i3-530 with dual-core, Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, 4MB cache or Intel Core i5 Processor i5-750 with quad-core, Intel 64, Virtualization Technology, Turbo Boost Technology (up to 3.20 GHz at max turbo mode), integrated 1333MHz dual-channel DDR3 memory controller, 8MB cache Processor in LGA1156 socket | | | | | | | | Small | |  | | | | |
| Implementation | | | | | | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) Slot 1: Low Profile, PCI Express 2.0 x16 (75w max) Slot 2: Low Profile, 32-bit PCI 2.3 | | | | | | |
| Memory | 2GB or 3GB std, 8GB max, UDIMM, PC3-10600 1333MHz DDR3*, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; three sockets available * System automatically clocks down for processors with 1066MHz DDR3 memory controller | | | | | | | | • Business black color; metal case • 12.5" W X 14.0" D X 3.9" H • 317mm W X 355mm D X 99mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk, optical drive removal • Toolless adapter retention • Toolless system board retention • System floor stand for vertical orientation | | | | | | |
| Graphics | A1U/A2U: Intel HD Graphics in processor, HDCP, DirectX® 10**, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display A8U: NVIDIA® GeForce® 310, PCIe x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10, NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts ** DirectX 10 is only available with Windows Vista and later | | | | | | | | | | Security | | | | |
| DP dongle | None | | | | | | | | | | • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement | | | | |
| SATA disk | 250GB or 500GB, SATA 3.0Gb/s 7200 rpm | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, two SATA connectors for disk and optical | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | |
| Chipset | Intel Q57 Express Chipset, Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | Environmental Features | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | • EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • GREENGUARD® certified • RoHS-compliant | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | | | | | | | | | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | | | | | | | | Supports ThinkVantage® technologies | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | Limited Warranty ¹ | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | ⇒ 3-year parts and labor ⇒ International Warranty Service® ⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts ³ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) ⇒ Onsite service upgrade options (in eligible locations): ⁷ <ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196) | | | | |
| Power supply | 240 watts with 85% efficiency, auto-sensing, active Power Factor Correction | | | | | | | | | | ⇒ ThinkPlus services at lenovo.com/thinkplus/warranty ⇒ Post warranty maintenance services available ⇒ 24 hour x 7 day ¹⁴ toll-free support during the warranty period ¹ via 800-426-7378 | | | | |
| Preloaded operating system ²⁰ | | | | | | Accessories | | | | | | | | | |
| - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional (with Windows 7 Professional 32 Recovery DVD) | | | | | | 1GB PC3-10600 DDR3 UDIMM 57Y4389 | | | | | | | | | |
| | | | | | | 2GB PC3-10600 DDR3 UDIMM 57Y4390 | | | | | | | | | |
| | | | | | | 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | | | | | | | | | |
| | | | | | | 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | | | | | | | | | |
| | | | | | | Super Multi-Burner DL DVD±RW SATA Drive 41N5620 | | | | | | | | | |
| | | | | | | DisplayPort to Single-link DVI-D Cable 45J7915 | | | | | | | | | |
| | | | | | | DisplayPort to VGA Monitor Cable 57Y4393 | | | | | | | | | |
| | | | | | | NVIDIA GeForce 512MB 310 (DP, VGA) 57Y4397 | | | | | | | | | |
| | | | | | | NVIDIA Quadro® 512MB FX380 LP (DP, DVI) 57Y4396 | | | | | | | | | |
| | | | | | | More accessories on O-M90 sheet | | | | | | | | | |
| | | | | | | Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | |
| | | | | | | Other accessories at lenovo.com/accessories | | | | | | | | | |
| Preloaded applications ⁵ (only some listed) | | | | | | | | | | | | | | | |
| • Rescue and Recovery™ | | | | | | | | | | | | | | | |
| • Client Security Solution™ | | | | | | | | | | | | | | | |
| • ThinkVantage Productivity Center | | | | | | | | | | | | | | | |
| • ThinkVantage System Update | | | | | | | | | | | | | | | |
| • ThinkVantage Power Manager | | | | | | | | | | | | | | | |
| • Lenovo System Toolbox | | | | | | | | | | | | | | | |
| • Norton™ Internet Security 2009 (30-day) | | | | | | | | | | | | | | | |
| • Adobe® Reader® | | | | | | | | | | | | | | | |
| • Adobe Flash® Player | | | | | | | | | | | | | | | |
| • Skype™ for Windows | | | | | | | | | | | | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | | | | | | | | | | | | |
| • Corel® Burn.Now™ (DVD±RW) | | | | | | | | | | | | | | | |
| • Corel DVD MovieFactory® (DVD±RW) | | | | | | | | | | | | | | | |
| • Corel WinDVD® (DVD±RW) | | | | | | | | | | | | | | | |

See footnotes for important warranty information
 US models announced January 15, 2010

⚡ US model withdrawn effective February 2010

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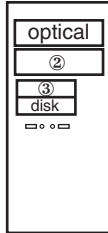
| Type-model | Slot x bay | Processor | GHz | Cores | Memory ^a | SATA disk | SATA optical | Graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Win7 preload | Global Educ | Avail date |
|------------|------------|-------------|------|-------|---------------------|--------------------|--------------|------------|--------------|-----------------|------------|--------------|-------------|------------|
| 3245-A9U | 2x3 | Core i3-530 | 2.93 | 2 | 2GB | 250GB ² | DVD±RW | Intel HD | VGA, DP | ES50 | None | Pro 32 | None | Mar 10 |
| 3245-B3U | 2x3 | Core i3-530 | 2.93 | 2 | 4GB | 320GB | DVD±RW | Intel HD | VGA, DP | ES50 | None | Pro 64 | None | Mar 10 |
| 3245-B1U | 2x3 | Core i5-750 | 2.66 | 4 | 3GB | 500GB | DVD±RW | 310 | VGA, DP | ES50 | None | Pro 32 | None | Mar 10 |

- **The most powerful, stable, and manageable desktop with next generation Intel platform**
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

| | | | | |
|---|--|---|--|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i3 Processor i3-530 with dual-core , Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, 4MB cache or Intel Core i5 Processor i5-750 with quad-core , Intel 64, Virtualization Technology, Turbo Boost Technology (up to 3.20 GHz at max turbo mode), integrated 1333MHz dual-channel DDR3 memory controller, 8MB cache Processor in LGA1156 socket | | Small <div><div>optical</div><div>disk (in rear)</div></div> | |
| Implementation | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) Slot 1: Low Profile, PCI Express 2.0 x16 (75w max) Slot 2: Low Profile, 32-bit PCI 2.3 | |
| Memory | 2GB, 3GB, or 4GB std , 8GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; three sockets available | | <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless system board retention• System floor stand for vertical orientation | |
| Graphics | A9U/B3U: Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 765MB [2GB models], 1759MB [4GB models]), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display B1U: NVIDIA® GeForce® 310 , PCI Express® 2.0 x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10, NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts | | | |
| DP dongle | None | | | |
| SATA disk | 250GB, 320GB, or 500GB , SATA 3.0Gb/s 7200 rpm | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, two SATA connectors for disk and optical | | | |
| eSATA port | None | | | |
| Diskette drive | None | | | |
| Media reader | None | | | |
| Chipset | Intel Q57 Express Chipset , Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | |
| Speaker | Internal speaker for business audio | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | |
| Intel AMT | None | | | |
| Modem | None | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | |
| Power supply | 240 watts with 85% efficiency, auto-sensing, active Power Factor Correction | | | |
| Preloaded operating system²⁰ | | Accessories | | |
| - <i>Some:</i> Genuine Windows® 7 Professional 32 | | 1GB PC3-10600 DDR3 UDIMM 57Y4389 | | |
| - <i>Some:</i> Genuine Windows 7 Professional 64 | | 2GB PC3-10600 DDR3 UDIMM 57Y4390 | | |
| | | 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | | |
| | | 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | | |
| | | Super Multi-Burner DL DVD±RW SATA Drive 41N5620 | | |
| | | DisplayPort to Single-link DVI-D Cable 45J7915 | | |
| | | DisplayPort to VGA Monitor Cable 57Y4393 | | |
| | | NVIDIA GeForce 512MB 310 (DP, VGA) 57Y4397 | | |
| | | NVIDIA Quadro® 512MB FX380 LP (DP, DVI) 57Y4396 | | |
| | | More accessories on O-M90 sheet | | |
| | | Acc Guide in pdf lenovo.com/accessoriesguide | | |
| | | Other accessories at lenovo.com/accessories | | |
| Preloaded applications⁵ (all OSes; only some listed) | | | | |
| • Rescue and Recovery™ | | | | |
| • Password Manager | | | | |
| • ThinkVantage System Update | | | | |
| • ThinkVantage Power Manager | | | | |
| • ThinkVantage Toolbox | | | | |
| • Norton™ Internet Security 2009 (30 days of virus definitions) | | | | |
| • Adobe® Reader® | | | | |
| • Adobe Flash® Player | | | | |
| • Skype™ for Windows | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | |
| • Corel® Burn.Now™ (DVD±RW) | | | | |
| • Corel DVD MovieFactory® (DVD±RW) | | | | |
| Security | | | | |
| <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Serial port I/O control• Individual USB port disablement | | | | |
| Environmental Features | | | | |
| <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant | | | | |
| Supports ThinkVantage® technologies | | | | |
| Limited Warranty¹ | | | | |
| ⇒ 3-year parts and labor | | | | |
| ⇒ International Warranty Service⁹ | | | | |
| ⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) | | | | |
| ⇒ Onsite service upgrade options (in eligible locations):⁷ | | | | |
| • 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192) | | | | |
| • 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193) | | | | |
| • 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194) | | | | |
| • 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195) | | | | |
| • 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196) | | | | |
| ⇒ ThinkPlus services at lenovo.com/thinkplus/warranty | | | | |
| ⇒ Post warranty maintenance services available | | | | |
| ⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | |

ThinkCentre® M90 Tower (3246) - TopSeller (XP with Win7 License)

Personal Systems Reference (PSREF)

| Type-model | Slot x bay | Processor | GHz | Cores | Memory ^a | SATA disk | 2nd Disk Bay | SATA optical | Graphics | Monitor conn | ENERGY STAR 5.0 | vPro | Preload | Recovery DVD | Global Educ | Avail date | | | | | | | | | | | | | | | | |
|--|--|---------------|------|-------|---------------------|--------------------|--------------|--------------|----------|---|-----------------|------|--|--------------|-------------|------------|--------------------------|---------|--------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|------------------------------------|---------|
| 3246-A1U | 4x4 | Pentium G6950 | 2.80 | 2 | 2GB | 250GB ² | None | DVD±RW | Intel HD | VGA, DP | ES50 | None | XP Pro | Pro 32 | None | Feb 10 | | | | | | | | | | | | | | | | |
| 3246-A2U | 4x4 | Core i3-530 | 2.93 | 2 | 2GB | 250GB | None | DVD±RW | Intel HD | VGA, DP | ES50 | None | XP Pro | Pro 32 | None | Feb 10 | | | | | | | | | | | | | | | | |
| 3246-A9U | 4x4 | Core i5-750 | 2.66 | 4 | 3GB | 500GB | None | DVD±RW | 310 | VGA, DP | ES50 | None | XP Pro | Pro 32 | None | Feb 10 | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none">• The most powerful, stable, and manageable desktop with next generation Intel platform• These small and medium business (SMB) models are part of the US TopSeller™ Program• These models have a 3-year limited warranty¹ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Pentium® Processor G6950 with dual-core, Intel 64, Virtualization Technology, integrated 1066MHz dual-channel DDR3 memory controller, 3MB cache or Intel Core™ i3 Processor i3-530 with dual-core, Intel 64, Intel Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, 4MB cache or Intel Core i5 Processor i5-750 with quad-core, Intel 64, Virtualization Technology, Turbo Boost Technology (up to 3.20 GHz at max turbo mode), integrated 1333MHz dual-channel DDR3 memory controller, 8MB cache Processor in LGA1156 socket | | | | | | | | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.4" D X 16.3" H• 175mm W X 442mm D X 414mm H• 24.2 lb (11.0 kg) in max configuration• Handle on top front• Power button on top handle• Toolless cover removal• Tilted front I/O for easy access• Toolless disk, optical drive removal• Toolless adapter retention  | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 2GB or 3GB std, 8GB max, UDIMM, PC3-10600 1333MHz DDR3³ , four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; three sockets available * System automatically clocks down for processors with 1066MHz DDR3 memory controller | | | | | | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk Slot 1: half-length, full-height, PCIe 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | A1U/A2U: Intel HD Graphics in processor, HDCP, DirectX® 10**, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display A9U: NVIDIA® GeForce® 310 , PCI Express® 2.0 x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10, NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts ** DirectX 10 is only available with Windows Vista and later | | | | | | | | | | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Serial port I/O control• Individual USB port disablement | | | | | | | | | | | | | | | | | | | |
| DP dongle | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 500GB, SATA 3.0Gb/s 7200 rpm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, three SATA connectors for disk and optical | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q57 Express Chipset Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | | | | | | | | | | Environmental Features <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | | | | | | | | | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing, 85% PSU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div>Preloaded operating system²⁰<ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional (with Windows 7 Professional 32 Recovery DVD)</div><div>Preloaded applications⁵ (only some listed)<ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• ThinkVantage Power Manager• Lenovo System Toolbox• Norton™ Internet Security 2009 (30-day)• Adobe® Reader®• Microsoft® Office 2007 Trial (60-day)• Corel® Burn.Now™ (DVD±RW)• Corel DVD MovieFactory® (DVD±RW)• Corel WinDVD® (DVD±RW)</div><div>Accessories<table><tr><td>1GB PC3-10600 DDR3 UDIMM</td><td>57Y4389</td></tr><tr><td>2GB PC3-10600 DDR3 UDIMM</td><td>57Y4390</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>NVIDIA GeForce 512MB 310 (DP, VGA)</td><td>57Y4397</td></tr></table>More accessories on O-M90 sheet Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories</div></div> | | | | | | | | | | | | | | | | | 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | NVIDIA GeForce 512MB 310 (DP, VGA) | 57Y4397 |
| 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA GeForce 512MB 310 (DP, VGA) | 57Y4397 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

US models announced January 15, 2010

⚡ US model withdrawn effective February 2010

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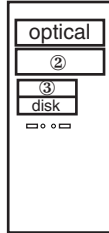
(MELB1-23) January 2010

ThinkCentre® M90 Tower (3246) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Slot x bay | Processor | GHz | Cores | Memory ^a | SATA disk | 2nd Disk Bay | SATA optical | Graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Win7 preload | Global Educ | Avail date |
|------------|------------|-------------|------|-------|---------------------|--------------------|--------------|--------------|------------|--------------|-----------------|------------|--------------|-------------|------------|
| 3246-B1U | 4x4 | Core i3-530 | 2.93 | 2 | 2GB | 250GB ² | None | DVD±RW | Intel HD | VGA, DP | ES50 | None | Pro 32 | None | Mar 10 |
| 3246-B2U | 4x4 | Core i5-750 | 2.66 | 4 | 3GB | 500GB | None | DVD±RW | 310 | VGA, DP | ES50 | None | Pro 32 | None | Mar 10 |
| 3246-B4U | 4x4 | Core i3-530 | 2.93 | 2 | 4GB | 320GB | None | DVD±RW | Intel HD | VGA, DP | ES50 | None | Pro 64 | None | Mar 10 |

- **The most powerful, stable, and manageable desktop with next generation Intel platform**
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|---|--|--|--|--|--------------------------|---------|--------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|------------------------------------|---------|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i3 Processor i3-530 with dual-core , Intel 64, Intel Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, 4MB cache or Intel Core i5 Processor i5-750 with quad-core , Intel 64, Virtualization Technology, Turbo Boost Technology (up to 3.20 GHz at max turbo mode), integrated 1333MHz dual-channel DDR3 memory controller, 8MB cache Processor in LGA1156 socket | | | | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.4" D X 16.3" H• 175mm W X 442mm D X 414mm H• 24.2 lb (11.0 kg) in max configuration• Handle on top front• Power button on top handle• Toolless cover removal• Tilted front I/O for easy access• Toolless disk, optical drive removal• Toolless adapter retention  | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 2GB, 3GB, or 4GB std , 8GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; three sockets available | | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk | | | | | | | | | | | | | | | | | | | | |
| Graphics | B1U/B4U: Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 765MB [2GB models], 1759MB [4GB models]), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display B2U: NVIDIA® GeForce® 310 , PCI Express® 2.0 x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10, NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts | | | | | Slot 1: half-length,full-height, PCIe 2.0 x16 (75w max) Slot 2: half-length,full-height, PCIe 2.0 x1 Slot 3: half-length,full-height, 32-bit PCI 2.3 Slot 4: half-length,full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | |
| DP dongle | None | | | | | Security <ul style="list-style-type: none">• Security chip (see information on left)• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Serial port I/O control• Individual USB port disablement | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB, 320GB, or 500GB , SATA 3.0Gb/s 7200 rpm | | | | | Environmental Features <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, three SATA connectors for disk and optical | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q57 Express Chipset Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing, 85% PSU | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- <i>Some:</i> Genuine Windows® 7 Professional 32- <i>Some:</i> Genuine Windows 7 Professional 64 Preloaded applications⁵ (all OSes; only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Corel® Burn.Now™ (DVD±RW)• Corel DVD MovieFactory® (DVD±RW) | | | | | | Accessories <table><tr><td>1GB PC3-10600 DDR3 UDIMM</td><td>57Y4389</td></tr><tr><td>2GB PC3-10600 DDR3 UDIMM</td><td>57Y4390</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>NVIDIA GeForce 512MB 310 (DP, VGA)</td><td>57Y4397</td></tr></table> More accessories on O-M90 sheet Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | | | | 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | NVIDIA GeForce 512MB 310 (DP, VGA) | 57Y4397 |
| 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA GeForce 512MB 310 (DP, VGA) | 57Y4397 | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information
 US models announced March 2, 2010

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 (MELB1-26) March 2010


ThinkCentre® M90p Eco Ultra Small (3257) - TopS (XP with Win7 License)

Personal Systems Reference (PSREF)

| Type-model | Slot x bay | Processor | Base GHz | Max Turbo GHz | Cores | Turbo Memory ^a | SATA disk | SATA optical | Integrated graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Preload | Recovery DVD | Global Educ | Avail date |
|------------|------------|-------------|----------|---------------|-------|---------------------------|--------------------|--------------|---------------------|--------------|-----------------|------------|---------|--------------|-------------|------------|
| 3257-A1U | 1x2 | Core i5-650 | 3.20 | 3.46 | 2 | 3GB | 500GB ² | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | XP Pro | Pro 32 | None | Feb 10 |
| 3257-A2U | 1x2 | Core i5-660 | 3.33 | 3.60 | 2 | 3GB | 500GB | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | XP Pro | Pro 32 | None | Feb 10 |

- Next generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0*
- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹

* For more information on Lenovo Secure Managed Client, see lenovo.com/acc

| | | | | | | | | | | | | | | | | | |
|--|---|--|--|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|---|---------|--|---------|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5 Processor i5-650 or i5-660 with dual-core, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache | | Eco Ultra Small  | | | | | | | | | | | | | | |
| Implementation | Processor in LGA1156 socket | | | | | | | | | | | | | | | | |
| Memory | 3GB std , 4GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook); <i>Italics</i> : standard memory in both sockets; no sockets available | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Slot 1: Low Profile, 32-bit PCI 2.3 <ul style="list-style-type: none">• Business black color; metal case• 11.0" W X 9.4" D X 3.1" H• 279mm W X 238mm D X 79mm H• 9.2 lb (4.2 kg) in maximum configuration• Hinged toolless cover for easy serviceability• Toolless disk and optical drive removal• System floor stand for vertical orientation | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics in processor, HDCP, DirectX® 10**, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display ** DirectX 10 is only available with Windows Vista and later | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Individual USB port disablement Environmental Features <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant Supports ThinkVantage® technologies Limited Warranty¹ <ul style="list-style-type: none">➤ 3-year parts and labor➤ International Warranty Service®➤ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)➤ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)➤ ThinkPlus services at lenovo.com/thinkplus/warranty➤ Post warranty maintenance services available➤ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | |
| DP dongle | None | | | | | | | | | | | | | | | | |
| SATA disk | 500GB , SATA 3.0Gb/s 7200 rpm | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, two SATA connectors for disk and optical | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | |
| Chipset | Intel Express Q57 Chipset , Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | | | | | | | | | | | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology 6.0 (Intel AMT 6.0) | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | | | |
| Power supply | External AC/DC adapter, 130 watts, autosensing, 87% PSU | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional (with Windows 7 Professional 32 Recovery DVD) Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• ThinkVantage Power Manager• Lenovo System Toolbox• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Corel® Burn.Now™ (DVD±RW)• Corel DVD MovieFactory® (DVD±RW)• Corel WinDVD® (DVD±RW) | | Accessories <table><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>Lenovo Vertical PC and Monitor Stand II</td><td>41R4474</td></tr><tr><td>ThinkCentre Ultra Small Under Desk Mount</td><td>40Y8625</td></tr></table> More accessories on O-M90 sheet Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | Lenovo Vertical PC and Monitor Stand II | 41R4474 | ThinkCentre Ultra Small Under Desk Mount | 40Y8625 |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | |
| Lenovo Vertical PC and Monitor Stand II | 41R4474 | | | | | | | | | | | | | | | | |
| ThinkCentre Ultra Small Under Desk Mount | 40Y8625 | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

US models announced January 15, 2010

✂ US model withdrawn effective February 2010

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(MELB1-4) January 2010

| Type-model | Slot x bay | Processor | Base GHz | Max Turbo GHz | Cores | Memory ^a | SATA disk | SATA optical | Integrated graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Win7 preload | Global Educ | Avail date |
|------------|------------|-------------|----------|---------------|-------|---------------------|--------------------|--------------|---------------------|--------------|-----------------|------------|--------------|-------------|------------|
| 3257-A5U | 1x2 | Core i5-650 | 3.20 | 3.46 | 2 | 3GB | 500GB ² | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | Pro 32 | None | Mar 10 |

- **Next generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology**
- **Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0***
- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This model has a 3-year limited warranty¹**

* For more information on Lenovo Secure Managed Client, see lenovo.com/acc

| | | | | |
|---|--|---|--|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5 Processor i5-650 with dual-core, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache Processor in LGA1156 socket | | Eco Ultra Small <div><div>optical</div><div>disk</div><div>□ ○ □</div></div> | |
| Implementation | Processor in LGA1156 socket | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk | |
| Memory | 3GB std , 4GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook); <i>Italics</i> : standard memory in both sockets; no sockets available | | Slot 1: Low Profile, 32-bit PCI 2.3 | |
| Graphics | Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 1277MB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display | | <ul style="list-style-type: none">• Business black color; metal case• 11.0" W X 9.4" D X 3.1" H• 279mm W X 238mm D X 79mm H• 9.2 lb (4.2 kg) in maximum configuration• Hinged toolless cover for easy serviceability• Toolless disk and optical drive removal• System floor stand for vertical orientation | |
| DP dongle | None | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Individual USB port disablement | |
| SATA disk | 500GB , SATA 3.0Gb/s 7200 rpm | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, two SATA connectors for disk and optical | | | |
| eSATA port | None | | Environmental Features <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant | |
| Diskette drive | None | | | |
| Media reader | None | | | |
| Chipset | Intel Express Q57 Chipset , Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | Limited Warranty ¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | |
| Rear ports | Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | |
| Speaker | Internal speaker for business audio | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | |
| Intel AMT | Intel Active Management Technology 6.0 (Intel AMT 6.0) | | | |
| Modem | None | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | |
| Power supply | External AC/DC adapter, 130 watts, autosensing, 87% PSU | | | |
| Preloaded operating system ²⁰ | | Accessories | | |
| - Genuine Windows® 7 Professional 32 | | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | |
| Preloaded applications ⁵ (only some listed) | | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | |
| • Rescue and Recovery™ | | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | |
| • Password Manager | | DisplayPort to Single-link DVI-D Cable | 45J7915 | |
| • ThinkVantage System Update | | DisplayPort to VGA Monitor Cable | 57Y4393 | |
| • ThinkVantage Power Manager | | Lenovo Vertical PC and Monitor Stand II | 41R4474 | |
| • ThinkVantage Toolbox | | ThinkCentre Ultra Small Under Desk Mount | 40Y8625 | |
| • Norton™ Internet Security 2009 (30 days of virus definitions) | | More accessories on O-M90 sheet | | |
| • Adobe® Reader® | | Acc Guide in pdf lenovo.com/accessoriesguide | | |
| • Adobe Flash® Player | | Other accessories at lenovo.com/accessories | | |
| • Skype™ for Windows | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | |
| • Corel® Burn.Now™ (DVD±RW) | | | | |
| • Corel DVD MovieFactory® (DVD±RW) | | | | |

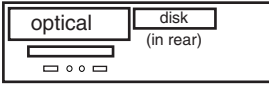
ThinkCentre® M90p Small (3269) - TopSeller (XP with Win7 License)

Personal Systems Reference (PSREF)

| Type-model | Slot x bay | Processor | Base GHz | Max Turbo GHz | Cores | Memory ^a | SATA disk | SATA optical | Integrated graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Preload | Recovery DVD | Global Educ | Avail date |
|------------|------------|-------------|----------|---------------|-------|---------------------|--------------------|--------------|---------------------|--------------|-----------------|------------|---------|--------------|-------------|------------|
| 3269-A1U | 2x3 | Core i5-650 | 3.20 | 3.46 | 2 | 3GB | 500GB ² | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | XP Pro | Pro 32 | None | Feb 10 |
| 3269-A2U | 2x3 | Core i5-660 | 3.33 | 3.60 | 2 | 3GB | 500GB | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | XP Pro | Pro 32 | None | Feb 10 |

- **Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology**
- **Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0***
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

* For more information on Lenovo Secure Managed Client, see lenovo.com/acc

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|---|--|--|--|--------------------------|---------|--------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|--------------------------------------|---------|---|---------|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5 Processor i5-650 or i5-660 with dual-core , Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache Processor in LGA1156 socket | | Small  | | | | | | | | | | | | | | | | | | |
| Implementation | | | | | | | | | | | | | | | | | | | | | |
| Memory | 3GB std , 8GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets; <i>Italics: standard memory in two sockets; two sockets available;</i> | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) Slot 1: Low Profile, PCI Express 2.0 x16 (75w max) Slot 2: Low Profile, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics in processor, HDCP, DirectX® 10**, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display ** DirectX 10 is only available with Windows Vista and later | | <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless system board retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | |
| DP dongle | None | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 500GB , SATA 3.0Gb/s 7200 rpm | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Serial port I/O control• Individual USB port disablement | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, two SATA connectors for disk and optical | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q57 Express Chipset Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | Environmental Features <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology 6.0 (Intel AMT 6.0) | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service®⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | | | | | | | |
| Power supply | 240 watts with 85% efficiency, auto-sensing, active Power Factor Correction | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional (with Windows 7 Professional 32 Recovery DVD) | | | | | | | | | | | | | | | | | | | | | |
| Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• ThinkVantage Power Manager• Lenovo System Toolbox• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Corel® Burn.Now™ (DVD±RW)• Corel DVD MovieFactory® (DVD±RW)• Corel WinDVD® (DVD±RW) | | | | | | | | | | | | | | | | | | | | | |
| Accessories <table><tr><td>1GB PC3-10600 DDR3 UDIMM</td><td>57Y4389</td></tr><tr><td>2GB PC3-10600 DDR3 UDIMM</td><td>57Y4390</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>NVIDIA® GeForce® 512MB 310 (DP, VGA)</td><td>57Y4397</td></tr><tr><td>NVIDIA Quadro® 512MB FX380 LP (DP, DVI)</td><td>57Y4396</td></tr></table> <p>More accessories on O-M90 sheet Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories</p> | | | | 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | NVIDIA® GeForce® 512MB 310 (DP, VGA) | 57Y4397 | NVIDIA Quadro® 512MB FX380 LP (DP, DVI) | 57Y4396 |
| 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | | | | | | | | | | | | | | | | | | | | |
| 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® GeForce® 512MB 310 (DP, VGA) | 57Y4397 | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro® 512MB FX380 LP (DP, DVI) | 57Y4396 | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information

US models announced January 15, 2010

⚡ US model withdrawn effective February 2010

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(MELB1-12) January 2010

| Type-model | Slot x bay | Processor | Base GHz | Max Turbo GHz | Cores | Memory ^a | SATA disk | SATA optical | Integrated graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Win7 preload | Global Educ | Avail date |
|------------|------------|-------------|----------|---------------|-------|---------------------|--------------------|--------------|---------------------|--------------|-----------------|------------|--------------|-------------|------------|
| 3269-A6U | 2x3 | Core i5-650 | 3.20 | 3.46 | 2 | 3GB | 500GB ² | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | Pro 32 | None | Mar 10 |
| 3269-A8U | 2x3 | Core i5-650 | 3.20 | 3.46 | 2 | 4GB | 320GB | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | Pro 64 | None | Mar 10 |

- **Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology**
- **Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0***
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

* For more information on Lenovo Secure Managed Client, see lenovo.com/acc

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--------------------------|---------|--------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|--------------------------------------|---------|---|---------|--|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5 Processor i5-650 with dual-core, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache Processor in LGA1156 socket | | Small <div><div>optical</div><div>disk</div><div>(in rear)</div></div> | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) | | | | | | | | | | | | | | | | | | | | |
| Memory | 3GB or 4GB std , 8GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets; <i>Italics: standard memory in two sockets; two sockets available</i> | | Slot 1: Low Profile, PCI Express 2.0 x16 (75w max) Slot 2: Low Profile, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 1277MB/[3GB models], 1759MB/[4GB models]), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display | | <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless system board retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | | | |
| DP dongle | None | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 320GB or 500GB , SATA 3.0Gb/s 7200 rpm | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, two SATA connectors for disk and optical | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q57 Express Chipset Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | Security <ul style="list-style-type: none">• Security chip (see information on left)• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Serial port I/O control• Individual USB port disablement | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology 6.0 (Intel AMT 6.0) | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | Environmental Features <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 240 watts with 85% efficiency, auto-sensing, active Power Factor Correction | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system ²⁰ <ul style="list-style-type: none">- <i>Some:</i> Genuine Windows® 7 Professional 32- <i>Some:</i> Genuine Windows 7 Professional 64 | | Accessories <table><tr><td>1GB PC3-10600 DDR3 UDIMM</td><td>57Y4389</td></tr><tr><td>2GB PC3-10600 DDR3 UDIMM</td><td>57Y4390</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>NVIDIA® GeForce® 512MB 310 (DP, VGA)</td><td>57Y4397</td></tr><tr><td>NVIDIA Quadro® 512MB FX380 LP (DP, DVI)</td><td>57Y4396</td></tr></table> More accessories on O-M90 sheet | | 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | NVIDIA® GeForce® 512MB 310 (DP, VGA) | 57Y4397 | NVIDIA Quadro® 512MB FX380 LP (DP, DVI) | 57Y4396 | | |
| 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® GeForce® 512MB 310 (DP, VGA) | 57Y4397 | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA Quadro® 512MB FX380 LP (DP, DVI) | 57Y4396 | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded applications ⁵ (all OSes; only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Corel® Burn.Now™ (DVD±RW)• Corel DVD MovieFactory® (DVD±RW) | | Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | |
| Limited Warranty ¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | | | |

ThinkCentre® M90p Tower (3282) - TopSeller (XP with Win7 License)

Personal Systems Reference (PSREF)

| Type-model | Slot x bay | Processor | Base GHz | Max Turbo GHz | Cores | Memory ⁸ | SATA disk | 2nd Disk Bay | SATA optical | Integrated graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Preload | Recovery DVD | Global Educ | Avail date |
|------------|------------|-------------|----------|---------------|-------|---------------------|--------------------|--------------|--------------|---------------------|--------------|-----------------|------------|---------|--------------|-------------|------------|
| 3282-A1U | 4x4 | Core i5-650 | 3.20 | 3.46 | 2 | 3GB | 500GB ² | None | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | XP Pro | Pro 32 | None | Feb 10 |
| 3282-A2U | 4x4 | Core i5-660 | 3.33 | 3.60 | 2 | 3GB | 500GB | None | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | XP Pro | Pro 32 | None | Feb 10 |

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0*
- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹

* For more information on Lenovo Secure Managed Client, see lenovo.com/acc

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|---|---------|--------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|----------------------------------|---------|--------------------------------------|---------|---------------------------------|--|---|--|---|--|--|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5 Processor i5-650 or i5-660 with dual-core , Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 17.4" D X 16.3" H• 175mm W X 442mm D X 414mm H• 24.2 lb (11.0 kg) in max configuration• Handle on top front• Power button on top handle• Toolless cover removal• Tilted front I/O for easy access• Toolless disk, optical drive removal• Toolless adapter retention <div><div>optical</div><div>②</div><div>③</div><div>disk</div><div>⏏ ⏏</div></div> | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | Processor in LGA1156 socket | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 3GB std , 8GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics in processor, HDCP, DirectX® 10*, uses main memory (up to 1GB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display * DirectX 10 is only available with Windows Vista and later | | | | | | | | | | | | | | | | | | | | | | | | |
| DP dongle | None | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 500GB , SATA 3.0Gb/s 7200 rpm | | Slot 1: half-length, full-height, PCIe 2.0 x16 (75w max) | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | Slot 2: half-length, full-height, PCIe 2.0 x1 | | | | | | | | | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, three SATA connectors for disk and optical | | Slot 3: half-length, full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | Slot 4: half-length, full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel Q57 Express Chipset Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | | Security <ul style="list-style-type: none">• Security chip (see information on left)• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Power-on password• Hard disk password• Boot sequence control• Boot without keyboard and mouse• Serial port I/O control• Individual USB port disablement | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology 6.0 (Intel AMT 6.0) | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | | Environmental Features <ul style="list-style-type: none">• EPEAT™ Gold rating• ENERGY STAR® 5.0-compliant• GREENGUARD® certified• RoHS-compliant | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing, 85% PSU | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system ²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional (with Windows 7 Professional 32 Recovery DVD) | | Accessories <table><tr><td>1GB PC3-10600 DDR3 UDIMM</td><td>57Y4389</td></tr><tr><td>2GB PC3-10600 DDR3 UDIMM</td><td>57Y4390</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>NVIDIA® GeForce® 512MB 310 (DP, VGA)</td><td>57Y4397</td></tr><tr><td colspan="2">More accessories on O-M90 sheet</td></tr><tr><td colspan="2">Acc Guide in pdf lenovo.com/accessoriesguide</td></tr><tr><td colspan="2">Other accessories at lenovo.com/accessories</td></tr></table> | 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | NVIDIA® GeForce® 512MB 310 (DP, VGA) | 57Y4397 | More accessories on O-M90 sheet | | Acc Guide in pdf lenovo.com/accessoriesguide | | Other accessories at lenovo.com/accessories | | |
| 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® GeForce® 512MB 310 (DP, VGA) | 57Y4397 | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-M90 sheet | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded applications ⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• ThinkVantage Power Manager• Lenovo System Toolbox• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Corel® Burn.Now™ (DVD±RW)• Corel DVD MovieFactory® (DVD±RW)• Corel WinDVD® (DVD±RW) | | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | | | | | |
| | | | Limited Warranty ¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service®⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information
 US models announced January 15, 2010
 ⚠ US model withdrawn effective February 2010

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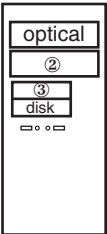
ThinkCentre® M90p Tower (3282) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

| Type-model | Slot x bay | Processor | Base GHz | Max Turbo GHz | Cores | Memory ⁸ | SATA disk | 2nd Disk Bay | SATA optical | Integrated graphics | Monitor conn | ENERGY STAR 5.0 | Intel vPro | Win7 preload | Global Educ | Avail date |
|------------|------------|-------------|----------|---------------|-------|---------------------|--------------------|--------------|--------------|---------------------|--------------|-----------------|------------|--------------|-------------|------------|
| 3282-A8U | 4x4 | Core i5-650 | 3.20 | 3.46 | 2 | 3GB | 500GB ² | None | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | Pro 32 | None | Mar 10 |
| 3282-B1U | 4x4 | Core i5-650 | 3.20 | 3.46 | 2 | 4GB | 320GB | None | DVD±RW | Intel HD | VGA, DP | ES50 | vPro | Pro 64 | None | Mar 10 |

- **Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology**
- **Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0***
- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹**

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| | | |
|---|--|---|
| Positioning Processor | Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5 Processor i5-650 with dual-core , Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache | Tower <ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in max configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention  |
| Implementation | Processor in LGA1156 socket | |
| Memory | 3GB or 4GB std. 8GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available | |
| Graphics | Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 1277MB/3GB models, 1759MB/4GB models), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display | |
| DP dongle | None | |
| SATA disk | 320GB or 500GB , SATA 3.0Gb/s 7200 rpm | Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader/diskette) Bay ④ 3.5", 1" high, no access, std disk |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | Slot 1: half-length, full-height, PCIe 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3 |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in chipset, three SATA connectors for disk and optical | |
| eSATA port | None | |
| Diskette drive | None | |
| Media reader | None | |
| Chipset | Intel Q57 Express Chipset Platform Controller Hub (PCH) for PCI, ethernet, and USB, SMSC® SCH5147 Super I/O | Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | Environmental Features <ul style="list-style-type: none"> • EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • GREENGUARD® certified • RoHS-compliant |
| Rear ports | Six USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | |
| Speaker | Internal speaker for business audio | |
| Ethernet | One gigabit ethernet port, Intel 82578DM, Wake on LAN® | |
| Intel AMT | Intel Active Management Technology 6.0 (Intel AMT 6.0) | |
| Modem | None | |
| Security chip | STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | |
| Mouse | Optical Wheel Mouse (USB connector), black, Lenovo logo | |
| Power supply | 280 watts with variable speed fan, autosensing, 85% PSU | |
| Preloaded operating system²⁰ <ul style="list-style-type: none"> - <i>Some:</i> Genuine Windows® 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64 Preloaded applications⁵ (all OSes; only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) | | Accessories 1GB PC3-10600 DDR3 UDIMM 57Y4389 2GB PC3-10600 DDR3 UDIMM 57Y4390 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 DisplayPort to Single-link DVI-D Cable 45J7915 DisplayPort to VGA Monitor Cable 57Y4393 NVIDIA® GeForce® 512MB 310 (DP, VGA) 57Y4397 More accessories on O-M90 sheet Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories |
| | | Limited Warranty¹ ⇒ 3-year parts and labor ⇒ International Warranty Service® ⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) ⇒ Onsite service upgrade options (in eligible locations):⁷ <ul style="list-style-type: none"> • 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192) • 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193) • 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194) • 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195) • 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196) ⇒ ThinkPlus services at lenovo.com/thinkplus/warranty ⇒ Post warranty maintenance services available ⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 |

See footnotes for important warranty information
US models announced March 2, 2010

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Partial list of accessories supported on ThinkCentre M90 and M90p**Memory**

Eco Ultra Small 3244/3692/3257/3853/5296 use notebook memory:
 1GB PC3-10600 DDR3 L-H SODIMM 55Y3709 *ann 03/02/10*
 1GB PC3-10600 DDR3 L-H SODIMM (25Pack) 57Y4415 *ann 03/02/10*
 2GB PC3-10600 DDR3 L-H SODIMM 55Y3710 *ann 03/02/10*
 2GB PC3-10600 DDR3 L-H SODIMM (25Pack) 57Y4416 *ann 03/02/10*

Small 3245/5485/3269/5536/5864, and

Tower 3246/5474/3282/5498/5852 use desktop memory:
 1GB PC3-10600 DDR3 Low-Halogen UDIMM 57Y4389 *ann 01/12/10*
 1GB PC3-10600 DDR3 L-H UDIMM (25-Pack) 57Y4419 *ann 01/12/10*
 2GB PC3-10600 DDR3 Low-Halogen UDIMM 57Y4390 *ann 01/12/10*
 2GB PC3-10600 DDR3 L-H UDIMM (25-Pack) 57Y4420 *ann 01/12/10*

Optical

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max⁴ 41N5618 *ann 09/26/06*
 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 *ann 09/26/06*

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm) 41N3015 *ann 01/24/06*
 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 *ann 11/06/07*
 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 *ann 08/19/08*
 150GB SATA 3.0Gb/s Disk (10000 rpm) 2.5" 43R2030 *ann 03/31/09*

USB 2.0 Essential Memory Key 4GB 45J7904 *ann 06/24/08*
 USB 2.0 Essential Memory Key 8GB 45J7905 *ann 07/15/08*
 USB 2.0 Essential Memory Key 32GB 45K1258 *ann 10/28/08*
 USB 2.0 Ultra Secure Memory Key 1GB 45J5915 *ann 08/26/08*
 USB 2.0 Ultra Secure Memory Key 2GB 45J5916 *ann 08/26/08*
 USB 2.0 Ultra Secure Memory Key 4GB 45J5917 *ann 08/26/08*
 USB 2.0 Ultra Secure Memory Key 8GB 45J5918 *ann 08/26/08*
 USB 2.0 Portable 320GB Hard Disk 45K1689 *ann 03/17/09*
 USB 2.0 Portable 500GB Hard Disk 45K1690 *ann 05/26/09*
 USB 2.0 Portable Secure 160GB Hard Disk 43R2018 *ann 11/18/08*
 USB 2.0 Portable Secure 320GB Hard Disk 43R2019 *ann 11/18/08*
 eSATA/USB 2.0 Secure 500GB Hard Drive⁵³ 57Y4400 *ann 01/07/10*
 USB 2.0 Super Multi-Burner Drive 41N5565 *ann 01/23/07*
 USB 2.0 Portable DVD Burner 43N3264 *ann 01/05/10*
⁵³USB-only attach.

Graphics

Small 3245/5485/3269/5536/5864 support Low Profile:
 NVIDIA® Quadro® 512MB FX 380 LP (DP, DVI) 57Y4396 *ann 02/02/10*
 NVIDIA GeForce® 512MB 310 (DP, VGA) 57Y4397 *ann 02/02/10*
 NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA) 57Y4167 *ann 03/02/10*

Tower 3246/5474/3282/5498/5852 support 75 watts max:
 NVIDIA Quadro 256MB NVS 295 45K1669 *ann 04/21/09*
 NVIDIA Quadro 512MB NVS 450 (4-DP, 4-DVI) 57Y4398 *ann 01/19/10*
 NVIDIA GeForce 512MB 310 (DP, VGA) 57Y4397 *ann 02/02/10*
 NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA) 57Y4167 *ann 03/02/10*

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard 73P5220 *ann 06/21/05*
 Enhanced Performance USB Keyboard 73P2620 *ann 03/23/04*
 Ultralim Wireless Keyboard and Mouse⁵² 57Y4700 *ann 09/15/09*
 ThinkPad® USB Keyboard with TrackPoint 55Y9003 *ann 08/18/09*
 Lenovo® USB Fingerprint Keyboard 73P4730 *ann 02/22/05*
 Lenovo USB Smartcard Keyboard 51J0155 *ann 03/24/09*
⁵²Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Mini Optical Mouse - Black (USB) 55Y9308 *ann 05/19/09*
 Lenovo Mini Optical Mouse - White (USB) 55Y9309 *ann 05/19/09*
 Lenovo Optical Mouse (USB) 06P4069 *ann 05/21/03*
 Lenovo ScrollPoint® Mouse(USB, Optical) 31P7405 *ann 08/27/02*
 Lenovo Laser Mouse (USB) 41U3074 *ann 01/23/07*
 Lenovo Wireless Laser Mouse - Black⁵² 45K1696 *ann 11/25/08*
 Lenovo Wireless Laser Mouse - Red/Black⁵² 51J0198 *ann 11/25/08*

More information at www.lenovo.com/support/mice

Multimedia

ThinkPad In-Ear Headphones 57Y4488 *ann 01/07/10*

Security

Kensington® MicroSaver® Cable Lock⁵⁶ 73P2582 *ann 12/29/03*
 Kensington Twin Head Cable Lock⁵⁶ 45K1620 *ann 09/30/08*
 USB Gemplus GemPC Smart Card Reader 41N3040 *ann 02/21/06*
⁵⁶Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Mounting Device

Eco Ultra Small 3244/3692/3257/3853/5296 support under desk mounting device:
 ThinkCentre Ultra Small Under Desk Mount 40Y8625 *ann 09/06/05*

Monitors

Lenovo D186 Wide 18.5" Monitor 2580AB1 *ann 01/12/10*
 Lenovo L2461x Wide 23.6" Monitor 4015HB1 *ann 01/05/10*
 ThinkVision® L1711p 17" Monitor 5047HB2 *ann 10/20/09*
 ThinkVision L1900p 19" Monitor 4431HE1 *ann 11/11/08*
 ThinkVision L1951p Wide 19" Monitor 2448HB6 *ann 10/20/09*
 ThinkVision L2250p Wide 22" Monitor 2572HB6 *ann 10/20/09*
 ThinkVision L2251p Wide 22" Monitor 2572HD6 *ann 10/20/09*
 ThinkVision L2251x Wide 22" Monitor 2578HB6 *ann 10/20/09*
 ThinkVision L2440p Wide 24" Monitor 4420HB2 *ann 09/17/08*

More information at www.lenovo.com/thinkvision

Monitor Accessories⁴⁶

Eco Ultra Small 3244/3692/3257/3853/5296 support:
 Lenovo Vertical PC and Monitor Stand II 41R4474 *ann 01/27/09*

All:

Lenovo USB-to-DVI Monitor Adapter 45K5296 *ann 05/12/09*
 DisplayPort™ to Single-link DVI-D Cable 45J7915 *ann 08/05/08*
 DisplayPort to VGA Monitor Cable 57Y4393 *ann 08/04/09*
 ThinkVision USB Soundbar 40Y7616 *ann 08/23/05*
 ThinkVision Soundbar 45K1263 *ann 09/16/08*
 Kensington MicroSaver Cable Lock⁵⁶ 73P2582 *ann 12/29/03*
 Kensington Twin Head Cable Lock⁵⁶ 45K1620 *ann 09/30/08*
 Radial Arm 19K4464 *ann 05/05/00*
⁴⁶Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

Medialess License Key (MLK)

Microsoft® Office 2007 Basic, English 43R1528 *ann 07/03/07*
 Microsoft Office 2007 Small Business, Engl 43R1534 *ann 07/03/07*
 Microsoft Office 2007 Professional, English 43R1531 *ann 07/03/07*

For more information on desktop accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo ThinkCentre A58e Tower



Lenovo ThinkCentre A58e Tower with
Lenovo ThinkVision monitor



Lenovo ThinkCentre A58e Tower



Lenovo ThinkCentre A58e Tower



Lenovo ThinkCentre A58e Tower



Lenovo ThinkCentre A58e Tower

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ^a | SATA disk | SATA optical | Integrated graphics | Win7 preload | Global Educ | Avail date |
|-------------|------------|------------|---------------|------|----------|-------|---------------------|--------------------|--------------|---------------------|--------------|-------------|------------|
| A58e | 0841-A4U | 4x2 | Celeron E3200 | 2.40 | 1MB | 2 | 1GB | 250GB ² | DVD | GMA 3100 | Pro 32 | None | Jan 10 |
| A58e | 0841-A5U | 4x2 | Pentium E5300 | 2.60 | 2MB | 2 | 2GB | 250GB | DVD±RW | GMA 3100 | Pro 32 | None | Jan 10 |
| A58e | 0841-A6U | 4x2 | Pentium E5300 | 2.60 | 2MB | 2 | 3GB | 320GB | DVD±RW | GMA 3100 | Pro 32 | None | Jan 10 |
| A58e | 0841-ADU | 4x2 | Pentium E5400 | 2.70 | 2MB | 2 | 2GB | 250GB | DVD±RW | GMA 3100 | Pro 32 | None | Jan 10 |
| A58e | 0841-AEU | 4x2 | Pentium E5400 | 2.70 | 2MB | 2 | 3GB | 320GB | DVD±RW | GMA 3100 | Pro 32 | None | Jan 10 |

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **Affordable and reliable computing for everyday business tasks**
- **These models have a 1-year limited warranty¹**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|-------------------------|---------|-------------------------|---------|-----------------------------------|---------|---|---------|----------------------------------|---------|--------------------------------------|---------|--------------------------------------|---------|----------------------------------|--|---|--|---|--|
| Positioning Processor | Quality and reliability for small/medium business Intel® Celeron® Processor E3200 with dual-core , 800MHz system bus, and 1MB L2 cache or Intel Pentium® Processor E5300 or E5400 with dual-core , 800MHz system bus, and 2MB L2 cache Processor in LGA775 socket | | | Tower <ul style="list-style-type: none">• Business black color; metal case• 6.9" W X 16.7" D X 14.6" H• 175mm W X 425mm D X 371mm H• 19.6 lb (8.9 kg) in typical configuration• Handle on top front• Power button on top handle <div><div>optical</div><div>disk</div></div> | | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std , 4GB max ⁸ , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-Italics:</i> standard memory in one socket; one socket available | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator 3100 (GMA 3100) , integrated graphics in G31, uses main memory, one analog VGA DB-15 connector | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Slot 1: half-length,full-height, PCI Express x16 Slot 2: half-length,full-height, PCI Express x1 Slot 3: half-length,full-height, 32-bit PCI 2.3 Slot 4: half-length,full-height, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm | | | Security <ul style="list-style-type: none">• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Boot sequence control• Boot without keyboard, mouse | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD | <i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), three SATA connectors | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel G31 Express Chipset; I/O Controller Hub 7 (ICH7) | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | None | | | | | | | | | | | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057 | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | RoHS-compliant | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 180 watts, universal, manual switch | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system ²⁰ <ul style="list-style-type: none">- Genuine Windows® 7 Professional 32 Preloaded applications ⁵ (only some listed) <ul style="list-style-type: none">• ThinkVantage® Product Recovery• ThinkVantage System Update• ThinkVantage Power Manager• Norton™ Internet Security 2009 (30 days of virus definitions)• Lenovo System Toolbox• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW) | | | Accessories <table><tr><td>1GB PC2-6400 DDR2 UDIMM</td><td>41U2977</td></tr><tr><td>2GB PC2-6400 DDR2 UDIMM</td><td>41U2978</td></tr><tr><td>Lenovo USB-to-DVI Monitor Adapter</td><td>45K5296</td></tr><tr><td>DisplayPort™ to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>DisplayPort to VGA Monitor Cable</td><td>57Y4393</td></tr><tr><td>ADD2 DVI-D Monitor Connection (HDCP)</td><td>43R1985</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td colspan="2">More accessories on O-A58E sheet</td></tr><tr><td colspan="2">Acc Guide in pdf lenovo.com/accessoriesguide</td></tr><tr><td colspan="2">Other accessories at lenovo.com/accessories</td></tr></table> | | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | Lenovo USB-to-DVI Monitor Adapter | 45K5296 | DisplayPort™ to Single-link DVI-D Cable | 45J7915 | DisplayPort to VGA Monitor Cable | 57Y4393 | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | More accessories on O-A58E sheet | | Acc Guide in pdf lenovo.com/accessoriesguide | | Other accessories at lenovo.com/accessories | |
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | | | | | | | | | | | | | | | | | | | | | | | | |
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort™ to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to VGA Monitor Cable | 57Y4393 | | | | | | | | | | | | | | | | | | | | | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | |
| More accessories on O-A58E sheet | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acc Guide in pdf lenovo.com/accessoriesguide | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Limited Warranty ¹ <ul style="list-style-type: none">⇒ 1-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 45K5951)• 2-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5949)• 2-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5952)• 3-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5950)• 3-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5953)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | | |

Partial list of accessories supported on ThinkCentre A58e Tower

Memory

| | | |
|-----------------------------------|---------|--------------|
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | ann 09/26/06 |
| 1GB PC2-6400 DDR2 UDIMM (25-Pack) | 51J0549 | ann 03/17/09 |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | ann 01/08/08 |
| 2GB PC2-6400 DDR2 UDIMM (25-Pack) | 51J0550 | ann 03/17/09 |

Optical

| | | |
|--|---------|--------------|
| DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴ | 41N5618 | ann 09/26/06 |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | ann 09/26/06 |

Storage and removable storage

| | | |
|---|---------|--------------|
| 160GB SATA 3.0Gb/s Disk (7200 rpm) | 09N4254 | ann 05/19/03 |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | ann 01/24/06 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Graphics

| | | |
|---|---------|--------------|
| DisplayPort™ to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |
| DisplayPort to VGA Monitor Cable ⁵⁰ | 57Y4393 | ann 08/04/09 |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ann 11/06/07 |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | ann 11/18/08 |
| NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA) | 57Y4167 | ann 03/02/10 |

⁵⁰ Attaches to the ThinkCentre compatible DisplayPort graphics card.

More information at www.lenovo.com/support/graphiccards

Keyboard

| | | |
|---|---------|--------------|
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultraslim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

| | | |
|---|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann 11/25/08 |

More information at www.lenovo.com/support/mice

Multimedia

| | | |
|-----------------------------|---------|--------------|
| ThinkPad® In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|-----------------------------|---------|--------------|

Security

| | | |
|--|---------|--------------|
| Kensington® MicroSaver® Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

More information at www.lenovo.com/thinkvision

Monitor Accessories⁴⁶

| | | |
|--|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

Medialess License Key (MLK)

| | | |
|---|---------|--------------|
| Microsoft® Office 2007 Basic, English | 43R1528 | ann 07/03/07 |
| Microsoft Office 2007 Small Business, Engl | 43R1534 | ann 07/03/07 |
| Microsoft Office 2007 Professional, English | 43R1531 | ann 07/03/07 |

For more information on desktop accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo ThinkCentre A58 Small and
Lenovo ThinkCentre A58 Tower



Lenovo ThinkCentre A58 Small with
Lenovo ThinkVision monitor



Lenovo ThinkCentre A58 Small



Lenovo ThinkCentre A58 Small
with dual Lenovo ThinkVision monitors



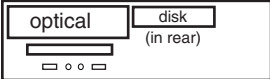
Lenovo ThinkCentre A58 Tower



Lenovo ThinkCentre A58 Tower

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ⁶ | SATA disk | SATA optical | Graphics | Preload | Global Educ | Avail date |
|------|------------|------------|---------------|------|----------|-------|---------------------|--------------------|--------------|----------|---------|-------------|------------|
| A58 | 7522-M8U | 2x3 | Celeron E3200 | 2.40 | 1MB | 2 | 1GB | 250GB ² | DVD±RW | GMA | XP Pro | None | Nov 09 |
| A58 | 7522-K6U | 2x3 | Pentium E6300 | 2.80 | 2MB | 2 | 2GB | 250GB | DVD±RW | GMA | XP Pro | None | Nov 09 |
| A58 | 7522-K7U | 2x3 | Pentium E6300 | 2.80 | 2MB | 2 | 3GB | 320GB | DVD±RW | GMA | XP Pro | None | Nov 09 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|---|-------------------------|---------|-------------------------|---------|------------------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|--------------------------------------|---------|--------------------------------------|---------|---------------------------------|---------|
| Positioning Processor | Quality, reliability, and security for small/medium businesses Intel® Celeron® Processor E3200 with dual-core , Virtualization Technology, 800MHz system bus, and 1MB L2 cache or Intel Pentium® Processor E6300 with dual-core , Virtualization Technology, 1066MHz system bus, and 2MB L2 cache Processor in LGA775 socket | | Small |  | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) | | | | | | | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std. , 4GB max ⁸ , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | Slot 1: Low Profile, PCI Express x16 (35w max) Slot 2: Low Profile, 32-bit PCI 2.3 | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 512MB <i>[1GB models]</i> , 1GB <i>[2GB or 3GB models]</i>), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm, vibration dampening | | Security <ul style="list-style-type: none">• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)<ul style="list-style-type: none">- optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, mouse, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors on planar | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | GREENGUARD® certified RoHS-compliant | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | Limited Warranty ¹ <ul style="list-style-type: none">⇒ 1-year parts and labor⇒ International Warranty Service®⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 45K5951)• 2-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5949)• 2-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5952)• 3-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5950)• 3-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5953)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Password Manager• Lenovo Care™• ThinkVantage System Update• ThinkVantage Power Manager• McAfee® VirusScan® Plus (30 days of virus definitions)• Lenovo System Toolbox• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Small Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) | | Accessories <table><tr><td>1GB PC2-6400 DDR2 UDIMM</td><td>41U2977</td></tr><tr><td>2GB PC2-6400 DDR2 UDIMM</td><td>41U2978</td></tr><tr><td>250GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>41N3015</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>ADD2 DVI-D Monitor Connection (HDCP)</td><td>43R1985</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® Quadro® 256MB FX 370 LP</td><td>55Y9275</td></tr></table> More accessories on O-A58 sheet Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 |
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | | | | | | | | | | | | | | | | | | | | | | | |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | | | | | | | | | | | | | | | | | | | | | | | |

| Name | Type-model | Slot x bay | Processor | GHz | L2 cache | Cores | Memory ^a | SATA disk | SATA optical | Graphics | Win7 preload | Global Educ | Avail date |
|------|------------|------------|---------------|------|----------|-------|---------------------|--------------------|--------------|----------|--------------|-------------|------------|
| A58 | 7522-M9U | 2x3 | Celeron E3200 | 2.40 | 1MB | 2 | 1GB | 250GB ² | DVD±RW | GMA | Pro 32 | None | Nov 09 |
| A58 | 7522-P1U | 2x3 | Pentium E5300 | 2.60 | 2MB | 2 | 2GB | 250GB | DVD±RW | GMA | Pro 32 | None | Nov 09 |
| A58 | 7522-P2U | 2x3 | Pentium E5300 | 2.60 | 2MB | 2 | 3GB | 320GB | DVD±RW | GMA | Pro 32 | None | Nov 09 |

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 1-year limited warranty¹**

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|-------------------------|---------|-------------------------|---------|------------------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|--|---------|--------------------------------------|---------|--------------------------------------|---------|---------------------------------|---------|
| Positioning Processor | Quality, reliability, and security for small/medium businesses Intel® Celeron® Processor E3200 with dual-core, Virtualization Tehnology, 800MHz system bus, and 1MB L2 cache or Intel Pentium® Processor E5300 with dual-core, 800MHz system bus, and 2MB L2 cache Processor in LGA775 socket | | | Small <div><div>optical</div><div>disk (in rear)</div></div> | | | | | | | | | | | | | | | | | | | | | | |
| Implementation | | | | Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 3.5", .5" high, access, open (reader) | | | | | | | | | | | | | | | | | | | | | | |
| Memory | 1GB, 2GB, or 3GB std , 4GB max ^a , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | | Slot 1: Low Profile, PCI Express x16 (35w max) Slot 2: Low Profile, 32-bit PCI 2.3 <ul style="list-style-type: none">• Business black color; metal case• 12.5" W X 14.0" D X 3.9" H• 317mm W X 355mm D X 99mm H• 16.5 lb (7.5 kg) in maximum configuration• Toolless cover flips up and tilts backward on rear hinges• Toolless disk, optical drive removal• Toolless adapter retention• Toolless systemboard retention• System floor stand for vertical orientation | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory (up to 253MB [1GB models], 765MB [2GB models], or 1277MB [3GB models]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm, vibration dampening | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA controller | Serial ATA, SATA 3.0Gb/s, integrated in ICH7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | | | | | | | | | | |
| SATA cables | Two SATA cables (each 1-drop to device), two SATA connectors on planar | | | | | | | | | | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speaker | One internal speaker for business audio | | | | | | | | | | | | | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, autosensing | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 | | | | Accessories <table><tr><td>1GB PC2-6400 DDR2 UDIMM</td><td>41U2977</td></tr><tr><td>2GB PC2-6400 DDR2 UDIMM</td><td>41U2978</td></tr><tr><td>250GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>41N3015</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>DisplayPort to Single-link DVI-D Cable</td><td>45J7915</td></tr><tr><td>ADD2 DVI-D Monitor Connection (HDCP)</td><td>43R1985</td></tr><tr><td>ATI™ Radeon™ HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® Quadro® 256MB FX 370 LP</td><td>55Y9275</td></tr></table> More accessories on O-A58 sheet | | | 1GB PC2-6400 DDR2 UDIMM | 41U2977 | 2GB PC2-6400 DDR2 UDIMM | 41U2978 | 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | DisplayPort to Single-link DVI-D Cable | 45J7915 | ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 |
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | | | | | | | | | | |
| DisplayPort to Single-link DVI-D Cable | 45J7915 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | | | | | | | | | | |
| NVIDIA® Quadro® 256MB FX 370 LP | 55Y9275 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preloaded applications ⁵ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Small Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW) | | | | Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Security <ul style="list-style-type: none">• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) - optional cable also locks the cover by deactivating the cover release buttons• Power-on password• Administrator password• Hard disk password• Boot sequence control• Boot without keyboard, mouse, diskette• Serial port I/O control• Parallel port I/O control• USB port disablement | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Supports ThinkVantage® technologies | | | | | | | | | | | | | | | | | | | | | | |
| | | | | GREENGUARD® certified RoHS-compliant | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Limited Warranty ¹ <ul style="list-style-type: none">⇒ 1-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 45K5951)• 2-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5949)• 2-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5952)• 3-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5950)• 3-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5953)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | | | | | | |

Partial list of accessories supported on ThinkCentre A58

Memory

| | | |
|-----------------------------------|---------|--------------|
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | ann 09/26/06 |
| 1GB PC2-6400 DDR2 UDIMM (25-Pack) | 51J0549 | ann 03/17/09 |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | ann 01/08/08 |
| 2GB PC2-6400 DDR2 UDIMM (25-Pack) | 51J0550 | ann 03/17/09 |

Optical

All:

| | | |
|--|---------|--------------|
| DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴ | 41N5618 | ann 09/26/06 |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | ann 09/26/06 |

Tower 7515/7611 supports:

| | | |
|------------------------------------|---------|--------------|
| Blu-ray™ Burner SATA 1.5Gb/s Drive | 45K1675 | ann 03/31/09 |
|------------------------------------|---------|--------------|

Storage and removable storage

| | | |
|------------------------------------|---------|--------------|
| 160GB SATA 3.0Gb/s Disk (7200 rpm) | 09N4254 | ann 05/19/03 |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | ann 01/24/06 |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | ann 11/06/07 |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | ann 08/19/08 |

| | | |
|---|---------|--------------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Graphics

Small 7522/7705 support Low Profile 35 watts max:

| | | |
|---|---------|--------------|
| DisplayPort™ to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ann 11/06/07 |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) | 45K1636 | ann 11/18/08 |
| NVIDIA® Quadro® 256MB FX 370 Low-Profile | 55Y9275 | ann 07/28/09 |
| NVIDIA GeForce® 310 DMS59(2-DVI, 2-VGA) | 57Y4167 | ann 03/02/10 |

Tower 7515/7611 supports 75 watts max:

| | | |
|--|---------|--------------|
| DisplayPort to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |
| ADD2 DVI-D Monitor Connection (HDCP) | 43R1985 | ann 11/06/07 |
| ATI Radeon HD 3470 256MB (DP, VGA) | 45K1636 | ann 11/18/08 |
| NVIDIA GeForce 9500GT 512MB (DP, DVI) | 45K1635 | ann 11/18/08 |
| NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA) | 57Y4167 | ann 03/02/10 |

⁵⁰ Attaches to the ThinkCentre compatible DisplayPort graphics card.More information at www.lenovo.com/support/graphiccards**Keyboard**

| | | |
|---|---------|--------------|
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Preferred Pro Full Size PS/2 Keyboard | 31P7415 | ann 06/04/02 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultraslim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.More information at www.lenovo.com/support/keyboards**Mouse**

| | | |
|---|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann 11/25/08 |

More information at www.lenovo.com/support/mice**Multimedia**

| | | |
|-----------------------------|---------|--------------|
| ThinkPad® In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|-----------------------------|---------|--------------|

Security

| | | |
|--|---------|--------------|
| Kensington® MicroSaver® Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.**Monitors**

| | | |
|-------------------------------------|---------|--------------|
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

More information at www.lenovo.com/thinkvision**Monitor Accessories⁴⁶**

| | | |
|--|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories**Medialess License Key (MLK)**

| | | |
|---|---------|--------------|
| Microsoft® Office 2007 Basic, English | 43R1528 | ann 07/03/07 |
| Microsoft Office 2007 Small Business, Engl | 43R1534 | ann 07/03/07 |
| Microsoft Office 2007 Professional, English | 43R1531 | ann 07/03/07 |

For more information on desktop accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessoriesAccessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo ThinkCentre A63 Tower



Lenovo ThinkCentre A63 Tower



Lenovo ThinkCentre A63 Tower



Lenovo ThinkCentre A63 Tower with
Lenovo ThinkVision® monitor



Lenovo ThinkCentre A63 Tower



Lenovo ThinkCentre A63 Tower

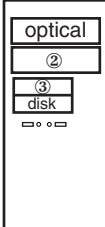
| Type-model | Slot x bay | AMD processor | GHz | Core | Memory ⁸ | SATA disk | 2nd Disk Bay | SATA optical | Media reader | Integrated graphics | Monitor connectors | Int speaker | Win7 preload | Global Educ | Avail date |
|------------|------------|---------------|-----|--------|---------------------|--------------------|--------------|--------------|--------------|---------------------|--------------------|-------------|--------------|-------------|------------|
| 4013-A7U | 4x4 | Sempron 140 | 2.7 | Single | 1GB | 250GB ² | None | DVD | None | 3000 | VGA, DVI-D | Int | Prem 32 | None | Feb 10 |

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has a 1-year limited warranty¹

| | | |
|---|--|---|
| Positioning Processor | Optimized for small and medium businesses AMD® Sempron™ Processor 140 with single-core, 4000MHz HyperTransport™ Bus, AMD Virtualization™ (AMD-V™) technology, AMD64 technology, int DDR3 memory controller, and 1MB L2 cache | Tower <ul style="list-style-type: none">• Business black color• 6.9" W X 17.4" D X 16.2" H• 175mm W X 442mm D X 412mm H• 24.2lb (11.0kg) in typical configuration• Handle on top front• Power button on top handle• Tilted front I/O for easy access• Toolless cover removal• Toolless disk, optical drive removal• Toolless adapter retention <div><div>optical</div><div>②</div><div>③</div><div>disk</div><div>□ □ □ □</div></div> |
| Implementation | Processor in Socket AM3 | |
| Memory | 1GB std , 4GB max, UDIMM, PC3-8500 1066MHz DDR3 , two 240-pin DIMM sockets; <i>Non-italics</i> : standard memory in one socket; one socket available | |
| Graphics | ATI™ Radeon™ 3000 , integrated in chipset, uses main memory (up to 256MB), one analog VGA DB-15 connector, one DVI-D connector, DirectX® 10, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with optional dual-head ATI Radeon discrete graphics adapter | |
| SATA disk(s) | 250GB , SATA 3.0Gb/s 7200 rpm | Bay ① 5.25", 1.6" high, access, std optical |
| SATA DVD | DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴ Drive | Bay ② 5.25", 1.6" high, access, open |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in SB710, four SATA connectors | Bay ③ 3.5", 1" high, access, open (reader) |
| eSATA port | None | Bay ④ 3.5", 1" high, no access, std disk |
| Diskette drive | None | Slot 1: half-length,full-height, PCIe 2.0 x16 (75w max) |
| Media reader | None | Slot 2: half-length,full-height, PCIe 2.0 x1 |
| | | Slot 3: half-length,full-height, PCIe 2.0 x1 |
| | | Slot 4: half-length,full-height, 32-bit PCI 2.3 |
| Chipset | AMD 760G Chipset with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge / ITE Tech® IT8720 Super I/O | Security <ul style="list-style-type: none">• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Power-on password• Boot sequence control• Boot without keyboard and mouse• Serial port I/O control• Individual USB port disablement |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | |
| Rear ports | Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, DVI-D) | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | |
| Speaker | Internal speaker for business audio | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | |
| Modem | None | |
| Security chip | None | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | |
| Mouse | Optical Wheel Mouse (USB connector), 400dpi, black, Lenovo logo | |
| Power supply | 280 watts with variable speed fan, manual switch | Supports ThinkVantage® technologies |
| Preloaded operating system ²⁰ | Accessories | GREENGUARD® certified |
| - Genuine Windows® 7 Home Premium 32 | 1GB PC3-8500 DDR3 UDIMM 45J5434 | RoHS-compliant |
| Preloaded applications ⁵ (only some listed) | 2GB PC3-8500 DDR3 UDIMM 45J5435 | |
| • ThinkVantage Product Recovery | 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 | |
| • Password Manager | 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 | |
| • ThinkVantage System Update | DVD-ROM DL SATA 1.5Gb/s 16X-48X Max 41N5618 | |
| • ThinkVantage Power Manager | ATI Radeon HD 3470 256MB (DP, VGA) 45K1636 | |
| • ThinkVantage Toolbox | NVIDIA® GeForce® 310 512MB (DP, VGA) 57Y4397 | |
| • Norton™ Internet Security 2009 (30 days of virus definitions) | More accessories on O-A63 sheet | |
| • Adobe® Reader® | Acc Guide in pdf lenovo.com/accessoriesguide | |
| • Adobe Flash® Player | Other accessories at lenovo.com/accessories | |
| • Skype™ for Windows | | Limited Warranty ¹ |
| • Microsoft® Office 2007 Trial (60-day) | | ⇒ 1-year parts and labor |
| | | ⇒ International Warranty Service ⁹ |
| | | ⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) |
| | | ⇒ Onsite service upgrade options (in eligible locations): ⁷ |
| | | • 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 45K5951) |
| | | • 2-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5949) |
| | | • 2-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5952) |
| | | • 3-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5950) |
| | | • 3-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5953) |
| | | ⇒ ThinkPlus services at lenovo.com/thinkplus/warranty |
| | | ⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 |

| Type-model | Slot x bay | AMD processor | GHz | Core | Memory ⁸ | SATA disk | 2nd Disk Bay | SATA optical | Media reader | Integrated graphics | Monitor connectors | Int speaker | Win7 preload | Global Educ | Avail date |
|------------|------------|------------------|-----|--------|---------------------|--------------------|--------------|--------------|--------------|---------------------|--------------------|-------------|--------------|-------------|------------|
| 5043-AEU | 4x4 | Sempron 140 | 2.7 | Single | 2GB | 250GB ² | None | DVD±RW | None | 3000 | VGA, DVI-D | Int | Pro 32 | None | Feb 10 |
| 5043-AFU | 4x4 | Athlon II X2 240 | 2.8 | Dual | 2GB | 250GB | None | DVD±RW | None | 3000 | VGA, DVI-D | Int | Pro 32 | None | Feb 10 |
| 5043-AGU | 4x4 | Athlon II X3 435 | 2.9 | Triple | 3GB | 320GB | None | DVD±RW | None | 3000 | VGA, DVI-D | Int | Pro 32 | None | Feb 10 |

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹

| | | | | | | | | | | | | | | | | | |
|--|---|---|---|--------------------------|---------|--------------------------|---------|------------------------------------|---------|----------------------------------|---------|---|---------|------------------------------------|---------|--------------------------------------|---------|
| Positioning Processor | <i>Optimized for small and medium businesses</i> AMD® Sempron™ Processor 140 with single-core, 4000MHz HyperTransport™ Bus, AMD Virtualization™ (AMD-V™) technology, AMD64 technology, int DDR3 memory controller, and 1MB L2 cache or AMD Athlon™ II X2 Processor 240 with dual-core , 4000MHz HyperTransport Bus, AMD Virtualization (AMD-V) technology, AMD64 technology, int DDR3 memory controller, and 2MB L2 cache (1MB per core) or AMD Athlon II X3 Processor 435 with triple-core , 4000MHz HyperTransport Bus, AMD Virtualization (AMD-V) technology, AMD64 technology, int DDR3 memory controller, and 1.5MB L2 cache (512KB per core) Processor in Socket AM3 | Tower <ul style="list-style-type: none">• Business black color• 6.9" W X 17.3" D X 15.8" H• 175mm W X 440mm D X 402mm H• 24.2lb (11.0kg) in typical configuration• Handle on top front• Power button on top handle• Tilted front I/O for easy access• Toolless cover removal• Toolless disk, diskette drive, optical drive removal• Toolless adapter retention Bay ① 5.25", 1.6" high, access, std optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, access, open (reader) Bay ④ 3.5", 1" high, no access, std disk |  | | | | | | | | | | | | | | |
| Implementation | Processor in Socket AM3 | | | | | | | | | | | | | | | | |
| Memory | 2GB or 3GB std, 4GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | | | | | | | | | | | | |
| Graphics | ATI™ Radeon™ 3000 , integrated in chipset, uses main memory (up to 256MB), one analog VGA DB-15 connector, one DVI-D connector, DirectX® 10, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with optional dual-head ATI Radeon discrete graphics adapter | | | | | | | | | | | | | | | | |
| SATA disk(s) | 250GB or 320GB , SATA 3.0Gb/s 7200 rpm | | | | | | | | | | | | | | | | |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive | | | | | | | | | | | | | | | | |
| SATA Controller | Serial ATA, SATA 3.0Gb/s, integrated in SB710, four SATA connectors | | | | | | | | | | | | | | | | |
| eSATA port | None | | | | | | | | | | | | | | | | |
| Diskette drive | None | | | | | | | | | | | | | | | | |
| Media reader | None | | | | | | | | | | | | | | | | |
| Chipset | AMD 760G Chipset with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge / ITE Tech® IT8720 Super I/O | | | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | | | | | | | | | | | | |
| Rear ports | Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, DVI-D) | | | | | | | | | | | | | | | | |
| Rear audio ports | Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm) | | | | | | | | | | | | | | | | |
| Internal connector | Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports) | | | | | | | | | | | | | | | | |
| Audio | High Definition (HD) Audio, Realtek® ALC662 codec | | | | | | | | | | | | | | | | |
| Speaker | Internal speaker for business audio | | | | | | | | | | | | | | | | |
| Ethernet | Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® | | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | | |
| Security chip | None | | | | | | | | | | | | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo | | | | | | | | | | | | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400dpi, black, Lenovo logo | | | | | | | | | | | | | | | | |
| Power supply | 280 watts with variable speed fan, manual switch | | | | | | | | | | | | | | | | |
| Preloaded operating system²⁰ <ul style="list-style-type: none">- Genuine Windows® 7 Professional 32 Preloaded applications⁵ (only some listed) <ul style="list-style-type: none">• ThinkVantage Product Recovery• Password Manager• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day) | | Accessories <table><tr><td>1GB PC3-10600 DDR3 UDIMM</td><td>57Y4389</td></tr><tr><td>2GB PC3-10600 DDR3 UDIMM</td><td>57Y4390</td></tr><tr><td>500GB SATA 3.0Gb/s Disk (7200 rpm)</td><td>43R1990</td></tr><tr><td>1TB SATA 3.0Gb/s Disk (7200 rpm)</td><td>45J7918</td></tr><tr><td>Super Multi-Burner DL DVD±RW SATA Drive</td><td>41N5620</td></tr><tr><td>ATI Radeon HD 3470 256MB (DP, VGA)</td><td>45K1636</td></tr><tr><td>NVIDIA® GeForce® 310 512MB (DP, VGA)</td><td>57Y4397</td></tr></table> More accessories on O-A63 sheet Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories | | 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | ATI Radeon HD 3470 256MB (DP, VGA) | 45K1636 | NVIDIA® GeForce® 310 512MB (DP, VGA) | 57Y4397 |
| 1GB PC3-10600 DDR3 UDIMM | 57Y4389 | | | | | | | | | | | | | | | | |
| 2GB PC3-10600 DDR3 UDIMM | 57Y4390 | | | | | | | | | | | | | | | | |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | | | | | | | | | | | | | | | | |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | | | | | | | | | | | | | | | | |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | | | | | | | | | | | | | | | | |
| ATI Radeon HD 3470 256MB (DP, VGA) | 45K1636 | | | | | | | | | | | | | | | | |
| NVIDIA® GeForce® 310 512MB (DP, VGA) | 57Y4397 | | | | | | | | | | | | | | | | |
| Security <ul style="list-style-type: none">• One lock to secure both cover and entire system to fixed object:<ul style="list-style-type: none">- Padlock loop (in rear for opt padlock)- Security slot (in rear for optional Kensington® MicroSaver® cable)• Power-on password• Boot sequence control• Boot without keyboard and mouse• Serial port I/O control• Parallel port I/O control• Individual USB port disablement | | | | | | | | | | | | | | | | | |
| Supports ThinkVantage technologies | | | | | | | | | | | | | | | | | |
| GREENGUARD® certified RoHS-compliant | | | | | | | | | | | | | | | | | |
| Limited Warranty¹ <ul style="list-style-type: none">⇒ 3-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 45K5955)• 3-year LOR 24x7, 4 hour response (ThinkPlus part number 45K5956)• 4-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5957)• 4-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5958)• 4-year LOR 24x7, 4 hour response (ThinkPlus part number 45K5959)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | | | | | | | | | | | | | | | | |

See footnotes for important warranty information
 US models announced January 12, 2010

Partial list of accessories supported on ThinkCentre A63

Memory

| | | |
|--|---------|--------------|
| 1GB PC3-8500 DDR3 UDIMM ⁴⁰ | 45J5434 | ann 11/18/08 |
| 1GB PC3-8500 DDR3 UDIMM (25-Pack) | 57Y4421 | ann 11/10/09 |
| 2GB PC3-8500 DDR3 UDIMM | 45J5435 | ann 11/18/08 |
| 2GB PC3-8500 DDR3 UDIMM (25-Pack) | 57Y4422 | ann 11/10/09 |
| 1GB PC3-10600 DDR3 Low-Halogen UDIMM | 57Y4389 | ann 01/12/10 |
| 1GB PC3-10600 DDR3 L-H UDIMM (25-Pack) | 57Y4419 | ann 01/12/10 |
| 2GB PC3-10600 DDR3 Low-Halogen UDIMM | 57Y4390 | ann 01/12/10 |
| 2GB PC3-10600 DDR3 L-H UDIMM (25-Pack) | 57Y4420 | ann 01/12/10 |

⁴⁰ When PC3-8500 is installed with systems that have PC3-10600 memory, PC3-10600 will operate at the PC3-8500 memory speed.

Optical

| | | |
|--|---------|--------------|
| DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴ | 41N5618 | ann 09/26/06 |
| Super Multi-Burner DL DVD±RW SATA Drive | 41N5620 | ann 09/26/06 |

Storage and removable storage

| | | |
|------------------------------------|---------|--------------|
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | ann 01/24/06 |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | ann 11/06/07 |
| 1TB SATA 3.0Gb/s Disk (7200 rpm) | 45J7918 | ann 08/19/08 |

| | | |
|---|---------|--------------|
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive ⁵³ | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

⁵³ USB-only attach.

Graphics

| | | |
|---|---------|--------------|
| DisplayPort™ to Single-link DVI-D Cable ⁵⁰ | 45J7915 | ann 08/05/08 |
| ATI™ Radeon™ HD 3470 256MB (DP, VGA) ⁵⁸ | 45K1636 | ann 11/18/08 |
| NVIDIA® GeForce® 310 512MB (DP, VGA) | 57Y4397 | ann 02/02/10 |
| NVIDIA GeForce 310 DMS59 (2-DVI, 2-VGA) | 57Y4167 | ann 03/02/10 |

⁵⁰ Attaches to the ThinkCentre compatible DisplayPort graphics card.

⁵⁸ Installing this graphics card does not disable the system monitor ports, thereby allowing a four monitor configuration.

More information at www.lenovo.com/support/graphiccards

Keyboard

| | | |
|---|---------|--------------|
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Preferred Pro Full Size PS/2 Keyboard | 31P7415 | ann 06/04/02 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| Ultraslim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

| | | |
|---|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann 11/25/08 |

More information at www.lenovo.com/support/mice

Multimedia

| | | |
|-----------------------------|---------|--------------|
| ThinkPad® In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|-----------------------------|---------|--------------|

Security

| | | |
|--|---------|--------------|
| Kensington® MicroSaver® Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

| | | |
|-------------------------------------|---------|--------------|
| Lenovo D186 Wide 18.5" Monitor | 2580AB1 | ann 01/12/10 |
| ThinkVision® L1711p 17" Monitor | 5047HB2 | ann 10/20/09 |
| ThinkVision L1900p 19" Monitor | 4431HE1 | ann 11/11/08 |
| ThinkVision L1951p Wide 19" Monitor | 2448HB6 | ann 10/20/09 |
| ThinkVision L2250p Wide 22" Monitor | 2572HB6 | ann 10/20/09 |
| ThinkVision L2251p Wide 22" Monitor | 2572HD6 | ann 10/20/09 |
| ThinkVision L2251x Wide 22" Monitor | 2578HB6 | ann 10/20/09 |
| ThinkVision L2440p Wide 24" Monitor | 4420HB2 | ann 09/17/08 |

More information at www.lenovo.com/thinkvision

Monitor Accessories⁴⁶

| | | |
|--|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| ThinkVision USB Soundbar | 40Y7616 | ann 08/23/05 |
| ThinkVision Soundbar | 45K1263 | ann 09/16/08 |
| Kensington MicroSaver Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

Medialess License Key (MLK)

| | | |
|---|---------|--------------|
| Microsoft® Office 2007 Basic, English | 43R1528 | ann 07/03/07 |
| Microsoft Office 2007 Small Business, Engl | 43R1534 | ann 07/03/07 |
| Microsoft Office 2007 Professional, English | 43R1531 | ann 07/03/07 |

For more information on desktop accessories, please visit:

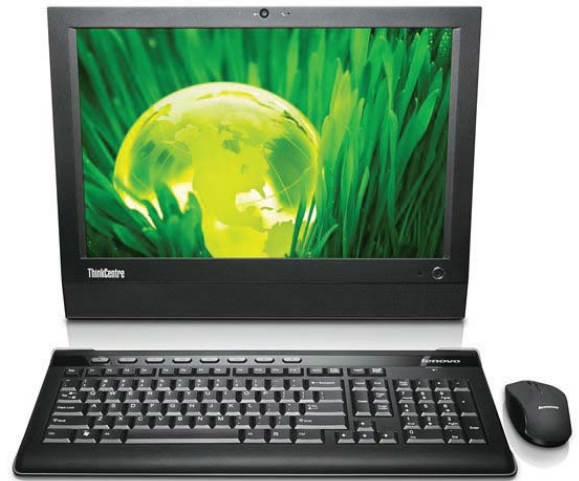
www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo ThinkCentre A70z All-In-One
(Wireless keyboard & mouse
on selected models only)



Lenovo ThinkCentre A70z All-In-One



Lenovo ThinkCentre A70z All-In-One



Lenovo ThinkCentre A70z All-In-One



ThinkCentre A70z Performance Stand
57Y4277



Lenovo ThinkCentre A70z All-In-One

| Type-model | Proc- essor | GHz | Memory | Widescreen display | Camera (mega- pixel) | Integrated graphics | SATA disk | SATA optical | Mini PCIe 802.11 wireless | Keyboard /Mouse | ENERGY STAR 5.0 | Win7 preload | Global Educ | Avail date |
|------------|----------------|------|--------|-----------------------|----------------------------|------------------------|--------------------|-----------------|---------------------------------|--------------------|--------------------|-----------------|----------------|---------------|
| 1165-A1U | E3200 | 2.40 | 1GB | 19.0" WXGA+ | 1.3M | GMA X4500 | 250GB ² | DVD±RW | | USB | ES50 | Home P | None | Dec 09 |
| 1165-A2U | E5300 | 2.60 | 2GB | 19.0" WXGA+ | 1.3M | GMA X4500 | 320GB | DVD±RW | | USB | ES50 | Pro 32 | None | Dec 09 |
| 1165-A3U | E7500 | 2.93 | 2GB | 19.0" WXGA+ | 1.3M | GMA X4500 | 320GB | DVD±RW | 11b/g/n ¹² | USB | ES50 | Pro 32 | None | Dec 09 |

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **Best space saving solution & excellent cable management**
- **These models have a 1-year limited warranty¹**

| | | | | | | |
|---|---|---|--|---|--|--|
| Positioning Processor | <i>All-In-One PC for business customers</i> Intel® Celeron® Processor E3200 with dual-core, 800MHz system bus, and 1MB L2 cache or Intel Pentium® Processor E5300 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache Processor in LGA775 socket | | | All-In-One <ul style="list-style-type: none">• Business black color• 18.58" W X 2.87" D X 14.0" H• 472mm W X 73mm D X 356mm H• 17.6 lb (8 kg) in maximum configuration• Handle in rear• Support VESA mount (100mm)• Picture frame style metallic stand (Tilt 10°-35°) | | |
| Implementation | | | | Bay ① 3.5", 1" high, no access, std disk (desktop) Bay ② slim, .5" high, access, std optical (notebook) | | |
| Memory | 1GB or 2GB std, 4GB max ⁸ , PC2-6400 800MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available | | | | | |
| Graphics | Intel Graphics Media Accelerator X4500 (GMA X4500) , integrated graphics in G41, uses main memory, DirectX® 10 | | | Security <ul style="list-style-type: none">• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)• Boot sequence control• Boot without keyboard, mouse• USB port disablement | | |
| SATA disk | 250GB or 320GB , SATA 3.0Gb/s, 3.5" wide, 7200 rpm | | | | | |
| SATA DVD±RW | DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable | | | | | |
| eSATA port | None | | | | | |
| Diskette drive | None | | | | | |
| Media reader | None | | | | | |
| Widescreen display | 19.0" (482.6mm) WXGA+ (1440x900) TFT color , anti-glare, CCFL backlight, 300 nits, 16:10 aspect ratio, 1000:1 contrast ratio | | | | | |
| Camera | <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus, integrated microphone (mono), LED indicator | | | | | |
| Chipset | Intel G41 Express Chipset ; I/O Controller Hub 7 (ICH7) | | | | | |
| Ports | <i>Rear:</i> Three USB 2.0, serial (9-pin), ethernet (RJ-45) <i>Side:</i> Three USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) | | | | | |
| Mini PCI Express | One Mini PCI Express slot <i>Some:</i> 11b/g/n wireless ¹³ , Mini PCIe adapter, Broadcom® BCM43225 | | | | | |
| 11b/g/n ¹² | High Definition (HD) Audio, CONEXANT™ CX20582 codec | | | Supports ThinkVantage® technologies | | |
| Audio | Two internal speakers (2 watt x 2) | | | | | |
| Speaker | None | | | | | |
| IEEE 1394 | None | | | ENERGY STAR® 5.0-compliant | | |
| Ethernet | Gigabit ethernet on planar, Realtek® RTL8111DL | | | RoHS-compliant | | |
| Intel AMT | None | | | Limited Warranty¹ <ul style="list-style-type: none">⇒ 1-year parts and labor⇒ International Warranty Service⁹⇒ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)⇒ Onsite service upgrade options (in eligible locations):⁷<ul style="list-style-type: none">• 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 45K5951)• 2-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5949)• 2-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5952)• 3-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5950)• 3-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5953)⇒ ThinkPlus services at lenovo.com/thinkplus/warranty⇒ Post warranty maintenance services available⇒ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378 | | |
| Modem | None | | | | | |
| Security chip | None | | | | | |
| Keyboard | Preferred Pro USB Keyboard (USB), 104-key, black, Lenovo® logo | | | | | |
| Mouse | Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo | | | | | |
| Power supply | 130 watts, autosensing, 85% PSU | | | | | |
| Preloaded operating system²⁰ | | Accessories | | | | |
| - <i>Some:</i> Genuine Windows® 7 Home Premium 32 | | 1GB PC2-6400 DDR2 UDIMM | | 41U2977 | | |
| - <i>Some:</i> Genuine Windows 7 Professional 32 | | 2GB PC2-6400 DDR2 UDIMM | | 41U2978 | | |
| | | ThinkCentre A70z Performance Stand | | 57Y4277 | | |
| | | More accessories on O-A70Z sheet | | | | |
| Preloaded applications⁵ (only some listed) | | Acc Guide in pdf lenovo.com/accessoriesguide | | | | |
| • ThinkVantage Product Recovery | | Other accessories at lenovo.com/accessories | | | | |
| • ThinkVantage System Update | | | | | | |
| • ThinkVantage Power Manager | | | | | | |
| • ThinkVantage Toolbox | | | | | | |
| • Lenovo Online Data Backup | | | | | | |
| • Norton™ Internet Security 2009 (30 days of virus definitions) | | | | | | |
| • Adobe® Reader® | | | | | | |
| • Adobe Flash® Player | | | | | | |
| • Skype™ for Windows | | | | | | |
| • Microsoft® Office 2007 Trial (60-day) | | | | | | |
| • Roxio® Creator® Business Edition (DVD±RW) | | | | | | |
| • Roxio MyDVD® (DVD±RW) | | | | | | |

See footnotes for important warranty information
 US models announced November 17, 2009

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 (TYMA1-1) November 2009

Partial list of accessories supported on ThinkCentre A70z AIO

Memory

| | | |
|-----------------------------------|---------|--------------|
| 1GB PC2-6400 DDR2 UDIMM | 41U2977 | ann 09/26/06 |
| 1GB PC2-6400 DDR2 UDIMM (25-Pack) | 51J0549 | ann 03/17/09 |
| 2GB PC2-6400 DDR2 UDIMM | 41U2978 | ann 01/08/08 |
| 2GB PC2-6400 DDR2 UDIMM (25-Pack) | 51J0550 | ann 03/17/09 |

Storage and removable storage

| | | |
|---|---------|--------------|
| 160GB SATA 3.0Gb/s Disk (7200 rpm) | 09N4254 | ann 05/19/03 |
| 250GB SATA 3.0Gb/s Disk (7200 rpm) | 41N3015 | ann 01/24/06 |
| 500GB SATA 3.0Gb/s Disk (7200 rpm) | 43R1990 | ann 11/06/07 |
| USB 2.0 Essential Memory Key 4GB | 45J7904 | ann 06/24/08 |
| USB 2.0 Essential Memory Key 8GB | 45J7905 | ann 07/15/08 |
| USB 2.0 Essential Memory Key 32GB | 45K1258 | ann 10/28/08 |
| USB 2.0 Ultra Secure Memory Key 1GB | 45J5915 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 2GB | 45J5916 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 4GB | 45J5917 | ann 08/26/08 |
| USB 2.0 Ultra Secure Memory Key 8GB | 45J5918 | ann 08/26/08 |
| USB 2.0 Portable 320GB Hard Disk | 45K1689 | ann 03/17/09 |
| USB 2.0 Portable 500GB Hard Disk | 45K1690 | ann 05/26/09 |
| USB 2.0 Portable Secure 160GB Hard Disk | 43R2018 | ann 11/18/08 |
| USB 2.0 Portable Secure 320GB Hard Disk | 43R2019 | ann 11/18/08 |
| eSATA/USB 2.0 Secure 500GB Hard Drive | 57Y4400 | ann 01/07/10 |
| USB 2.0 Super Multi-Burner Drive | 41N5565 | ann 01/23/07 |
| USB 2.0 Portable DVD Burner | 43N3264 | ann 01/05/10 |

Keyboard

| | | |
|---|---------|--------------|
| Preferred Pro USB Keyboard | 73P5220 | ann 06/21/05 |
| Enhanced Performance USB Keyboard | 73P2620 | ann 03/23/04 |
| UltraSlim Wireless Keyboard and Mouse ⁵² | 57Y4700 | ann 09/15/09 |
| ThinkPad USB Keyboard with TrackPoint | 55Y9003 | ann 08/18/09 |
| Lenovo® USB Fingerprint Keyboard | 73P4730 | ann 02/22/05 |
| Lenovo USB Smartcard Keyboard | 51J0155 | ann 03/24/09 |

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

| | | |
|---|---------|--------------|
| Lenovo Mini Optical Mouse - Black (USB) | 55Y9308 | ann 05/19/09 |
| Lenovo Mini Optical Mouse - White (USB) | 55Y9309 | ann 05/19/09 |
| Lenovo Optical Mouse (USB) | 06P4069 | ann 05/21/03 |
| Lenovo ScrollPoint® Mouse (USB, Optical) | 31P7405 | ann 08/27/02 |
| Lenovo Laser Mouse (USB) | 41U3074 | ann 01/23/07 |
| Lenovo Wireless Laser Mouse - Black ⁵² | 45K1696 | ann 11/25/08 |
| Lenovo Wireless Laser Mouse - Red/Black ⁵² | 51J0198 | ann 11/25/08 |

More information at www.lenovo.com/support/mice

Multimedia

| | | |
|-----------------------------|---------|--------------|
| ThinkPad® In-Ear Headphones | 57Y4488 | ann 01/07/10 |
|-----------------------------|---------|--------------|

Security

| | | |
|-------------------------------------|---------|--------------|
| Kensington® MicroSaver® Cable Lock | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock | 45K1620 | ann 09/30/08 |
| USB Gemplus GemPC Smart Card Reader | 41N3040 | ann 02/21/06 |

Stand

| | | |
|------------------------------------|---------|--------------|
| ThinkCentre A70z Performance Stand | 57Y4277 | ann 11/17/09 |
|------------------------------------|---------|--------------|

Monitor Accessories⁴⁶

| | | |
|--|---------|--------------|
| Lenovo USB-to-DVI Monitor Adapter | 45K5296 | ann 05/12/09 |
| Kensington MicroSaver Cable Lock ⁵⁶ | 73P2582 | ann 12/29/03 |
| Kensington Twin Head Cable Lock ⁵⁶ | 45K1620 | ann 09/30/08 |
| Radial Arm | 19K4464 | ann 05/05/00 |

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

Medialess License Key (MLK)

| | | |
|---|---------|--------------|
| Microsoft® Office 2007 Basic, English | 43R1528 | ann 07/03/07 |
| Microsoft Office 2007 Small Business, Engl | 43R1534 | ann 07/03/07 |
| Microsoft Office 2007 Professional, English | 43R1531 | ann 07/03/07 |

For more information on desktop accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/desktopaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

**Partial list of Lenovo® ThinkPlus Services⁷
for ThinkCentre desktops**

For more information see:

http://www.lenovo.com/services_warranty/us/en/index.html
ThinkPlus service upgrade options for ThinkCentre M series
ThinkCentre desktop with 1-year Onsite warranty
LOR = Lenovo Onsite Repair

| | |
|----------------------------------|---------|
| 1-year LOR 9x5 4-hour response | 41C9189 |
| 2-year LOR 9x5 Next Business Day | 41C9187 |
| 2-year LOR 9x5 4-hour response | 41C9190 |
| 3-year LOR 9x5 Next Business Day | 41C9188 |
| 3-year LOR 9x5 4-hour response | 41C9191 |

ThinkCentre desktop with 3-year Onsite warranty
LOR = Lenovo Onsite Repair

| | |
|----------------------------------|---------|
| 3-year LOR 9x5 4-hour response | 41C9192 |
| 3-year LOR 24x7 4-hour response | 41C9193 |
| 4-year LOR 9x5 Next Business Day | 41C9194 |
| 4-year LOR 9x5 4-hour response | 41C9195 |
| 4-year LOR 24x7 4-hour response | 41C9196 |

ThinkPlus service upgrade options for ThinkCentre A series
ThinkCentre desktop with 1-year Onsite warranty
LOR = Lenovo Onsite Repair

| | |
|----------------------------------|---------|
| 1-year LOR 9x5 4-hour response | 45K5951 |
| 2-year LOR 9x5 Next Business Day | 45K5949 |
| 2-year LOR 9x5 4-hour response | 45K5952 |
| 3-year LOR 9x5 Next Business Day | 45K5950 |
| 3-year LOR 9x5 4-hour response | 45K5953 |

ThinkCentre desktop with 3-year Onsite warranty
LOR = Lenovo Onsite Repair

| | |
|----------------------------------|---------|
| 3-year LOR 9x5 4-hour response | 45K5955 |
| 3-year LOR 24x7 4-hour response | 45K5956 |
| 4-year LOR 9x5 Next Business Day | 45K5957 |
| 4-year LOR 9x5 4-hour response | 45K5958 |
| 4-year LOR 24x7 4-hour response | 45K5959 |
| 5-year LOR 9x5 Next Business Day | 45K5963 |

ThinkPlus Secure Business
Lenovo Online Data Backup

- Secure offsite data storage
- 256-bit Advanced Encryption System
- Data recovery or access in case of an unforeseen event
- Automatic, remote management
- Choose which business critical data to back up

| | |
|--|---------|
| 1-year Lenovo Online Data Backup - 10GB | 51J0787 |
| 1-year Lenovo Online Data Backup - 25GB | 51J0795 |
| 1-year Lenovo Online Data Backup - 50GB | 45K5849 |
| 1-year Lenovo Online Data Backup - Unlimited | 45K5870 |

ThinkPlus Priority Support for enterprise customers

- 9x5 next-business-day response Lenovo Onsite Repair
- 24x7 support with priority routing and advanced level technicians

ThinkCentre desktop with 1-year Onsite warranty

| | |
|-------------------------|---------|
| 3-year Priority Support | 45J9087 |
|-------------------------|---------|

ThinkCentre desktop with 3-year Onsite warranty

| | |
|---|---------|
| 3-year Priority Support | 45J9088 |
| 4-year Priority Support | 45J9089 |
| 5-year Priority Support | 45J9090 |
| 3-year Priority Support 4-hour response | 45J9091 |
| 4-year Priority Support 4-hour response | 45J9092 |
| 5-year Priority Support 4-hour response | 45J9093 |

Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

- ¹ **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ² **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- ³ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. In the United States call 1-800-426-7378. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.
- ⁴ **CD and DVD list** maximum rates; rates are variable and are often less than the maximum.
- ⁵ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. License agreements may apply.

⁶ **Multi-Burner Plus** (part number 73P3305 or 73P3370) is a DVD±RW device that reads and writes to DVD-RAM, DVD-R, DVD-RW, DVD+R, and DVD+RW. It also reads and writes to CD-R and CD-RW media. 73P3370 also writes to DVD+R double layer media.

⁷ **ThinkPlus Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. P&L means parts and labor. P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.

⁸ **Memory:** For PCs without a separate graphics card, memory supports both system and video. Accessible system memory may be up to 384MB less than the amount stated, depending on video mode.

⁹ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

¹⁰ **Modem speeds:** Public network download speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

¹¹ **For combination drives,** maximum speeds only are given in the following order: CD read, CD write, CD re-write, DVD read.

¹² **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

¹³ **Wireless capability:** Requires compatible wireless-enabled options sold separately.

¹⁴ **Response times may vary.** May exclude some holidays. Telephone support may be subject to additional charges.

¹⁵ **Update Connector** is available at no charge to registered customers during the limited warranty period. Line charges may apply.

¹⁶ **Embedded Security Subsystem** works with optional VPN software.

- ¹⁸ **Embedded Security Subsystem** may require download of client security software from the Web.
- ¹⁹ **Asset ID** allows system-specific information to be stored in a chip inside the system; it does not have any radio frequency support.
- ²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

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